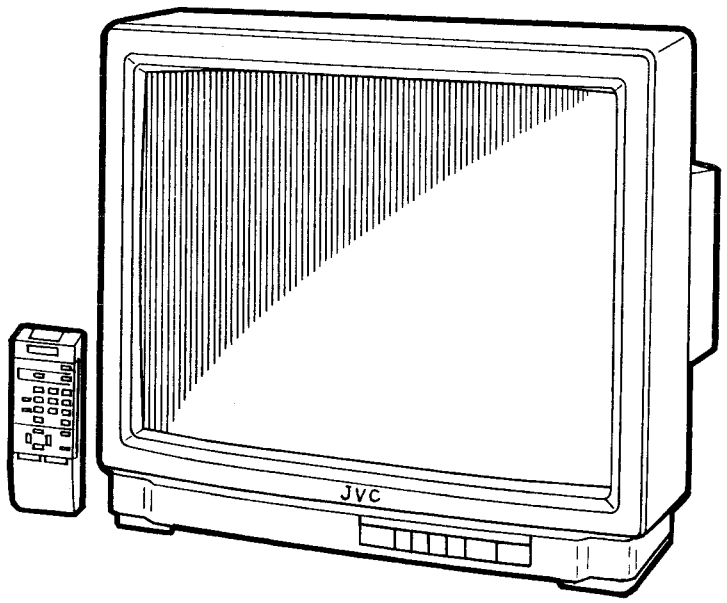
1063

JVC

INSTRUCTIONS

AV-2780S

COLOR MONITOR/RECEIVER



For Customer Use:

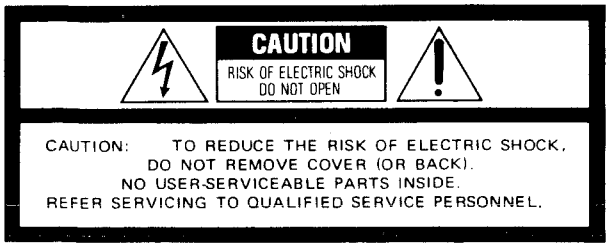
Enter below the Serial No. which is located on the rear of the cabinet. Retain this information for future reference.

Model No. AV – 2780S

Serial No.

1062

SAFETY PRECAUTION


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Caution:
Changes and modifications not approved by JVC could void the user's authority to operate the equipment.

WARNING:
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS TV SET TO RAIN OR MOISTURE.

CAUTION: TO INSURE PERSONAL SAFETY, OBSERVE THE FOLLOWING RULES REGARDING THE USE OF THIS UNIT.

1. Operate only from the power source specified on the unit.
2. Avoid damaging the AC plug and power cord.
3. Avoid improper installation and never position the unit where good ventilation is unattainable.
4. Do not allow objects or liquid into the cabinet openings.
5. In the event of trouble, unplug the unit and call a service technician. Do not attempt to repair it yourself or remove the rear cover

Caution:
When you do not use this TV set for a long period of time, be sure to disconnect the power plug from the AC outlet for your safety. If the TV set is plugged into an AC outlet, a small amount of current is applied to the TV set even if the TV set's power is turned off.

Thank you for purchasing a JVC color monitor/receiver (TV). Your JVC TV carries many useful features including the MASTER COMMAND *Ai* system which allows operation of all TV functions via a single remote control unit.
To ensure your complete understanding, please read all instructions in this booklet before operation.

FEATURES

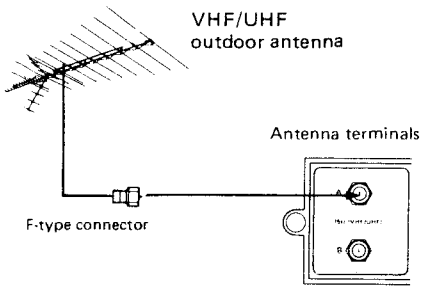
- 27-Inch FS (Full-Square) picture tube.
- Comb filter for improved picture quality.
- 180-Channel cable-compatible frequency synthesizer tuner with built-in MTS decoder.
- Video Noise Reduction circuitry to eliminate on-screen picture noise.
- Notch filter for preventing dot-interference at picture edges.
- S-VIDEO input terminal for taking best advantage of Super VHS.
- Video/audio input, line output and variable audio output terminals.
- Hyper-Bass Sound System for reproducing powerful bass sound with depth.
- Surround sound capability with external speaker terminals.
- MASTER COMMAND *Ai* remote control with multi-color on-screen "Menu" display, allowing interactive, total TV operation, and with LEARNING function for operating both TV and other components.

CONTENTS

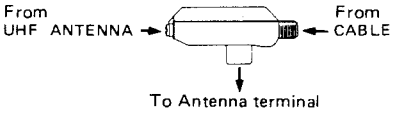
Installation....3
Remote Control Use....3
Controls and Their Locations....4
TV Operation....6
Function Buttons....8
Menu Buttons....10
Page 1
1. Channel Scan....10
2. Your Favorites....11
3. Auto Volume....11
Page 2
4. Home Sitter....11
5. 12HR Sleep Timer....12
6. Dual On Timer....13
Page 3
7. Child Timer....14
8. Channel Guard....15
9. Initial Set-up....17
More Useful Functions....22
Learning Buttons....24
Connecting to External Equipment....30
Before You Call for Service....35
Specifications....35

INSTALLATION

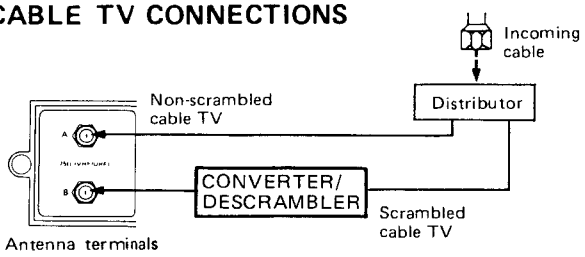
ANTENNA CONNECTIONS



- An outdoor antenna is recommended for good TV picture reception.
  (For installation of the outdoor antenna system, consult your local dealer.)
- Some cable companies require a converter box to receive all available programs. Others may require it for subscription or "premium" programming. Consult your local cable company for correct installation.
- Mode selection of "CABLE A" (non-scrambled cable TV) and "CABLE B" (scrambled cable TV) is performed by pressing ANT/CABLE button ㉜ on the Remote Control (or FUNCTION and CHANNEL/LEVEL (-/+) buttons on the front panel).
- When connecting both a cable (75-ohm coaxial) and a UHF antenna (300-ohm feeder), use the optional antenna mixer (CE41467) to make a single connection.
  Note: With this antenna mixer, reception of cable channels higher than "Channel W+17" is not possible.



CABLE TV CONNECTIONS



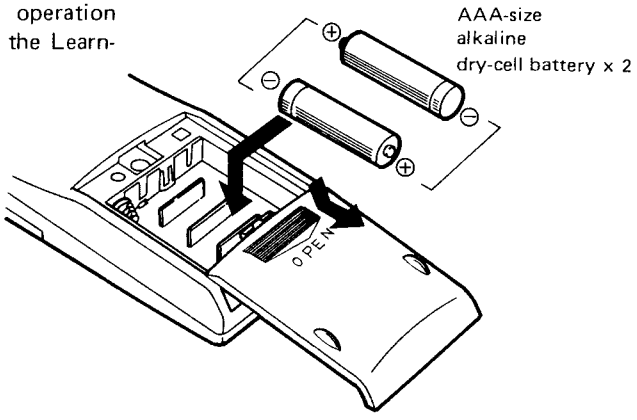
REMOTE CONTROL USE

Correct Use

- Point to Remote Control sensor ❻ of the TV set.
- The maximum operable distance is approximately 23 ft from the Remote Control sensor, and no more than 30° to either side of center.
- Operation of the Remote Control is most effective when there is nothing between it and the Remote Control sensor.
- Duration of the batteries is approximately 6 months to 1 year (duration varies according to frequency of use). Replace the batteries when the remote operation becomes unstable. Use alkaline dry-cell batteries.
- When using the buttons on the door of the Remote Control unit, be sure to shut the door before pressing the buttons.
- A TRANSMIT indicator lights when pressing the buttons. However, this indicator does not light when pressing a LEARNING button if that button has not been programmed with data. If the TRANSMIT indicator does not light after pressing buttons which have been programmed with data, it shows that the batteries are becoming too weak. Replace the batteries as soon as possible.
- The MASTER COMMAND *Ai* Remote Control operation does not function when programming buttons in the Learning mode (i.e., when the LEARN indicator is lit).

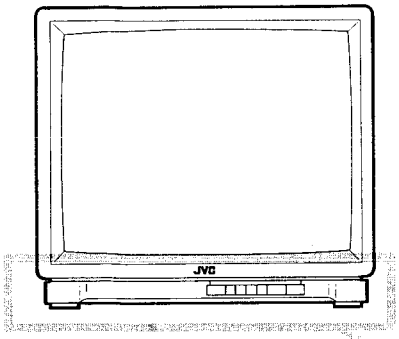
Battery Installation/Notes

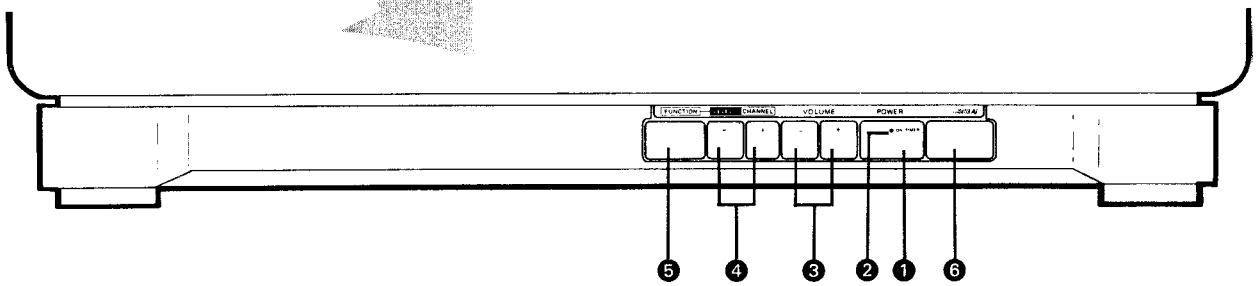
- Press and slide the cover in the direction of the arrow.
- Correctly install the batteries, observing (+/-) polarities as shown.
- Do not use a combination of old and new batteries or batteries of different types.
- If batteries become exhausted, remove and replace them soon.
- If Remote Control will not be used for more than 2 weeks, remove batteries.
- When battery leakage occurs, clean the battery compartment with a soft cloth and replace the batteries.



CONTROLS AND THEIR LOCATIONS

Front Panel Control Section

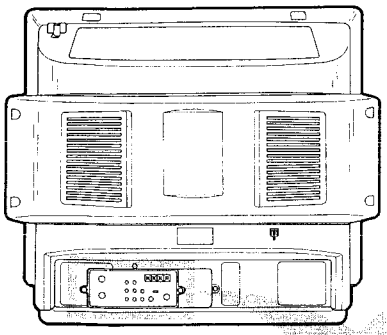


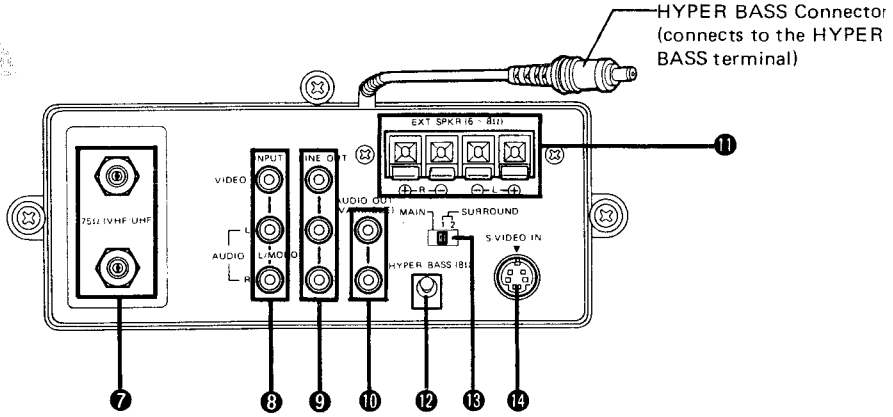


Front Panel Control Section

❶ POWER button
❷ POWER/ON TIMER indicator
❸ VOLUME (-/+) buttons
❹ LEVEL/CHANNEL (-/+) buttons
❺ FUNCTION button
❻ Remote Control sensor

Rear Panel Control Section

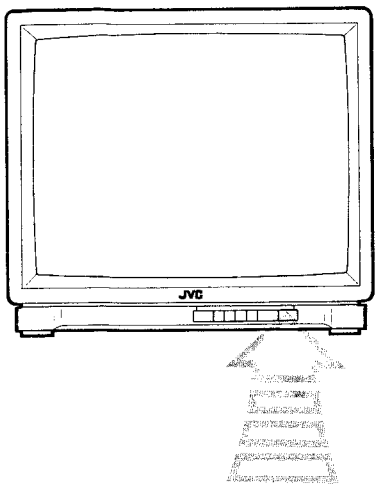




Rear Panel Control Section

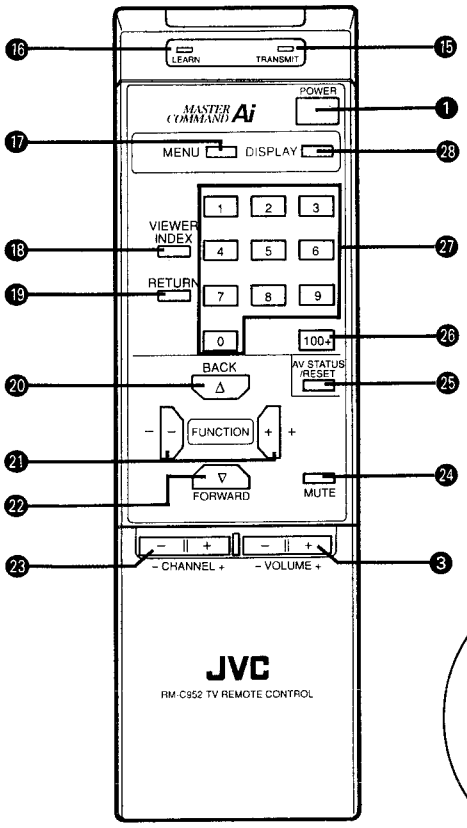
❼ Antenna terminals
❽ VIDEO/AUDIO INPUT connectors
❾ LINE OUT connectors
❿ AUDIO OUT (VARIABLE) connectors
⓫ EXT SPKR terminals (L/R)
⓬ HYPER BASS terminal
⓭ EXT SPKR switch
⓮ S-VIDEO IN connector

Remote Control Section



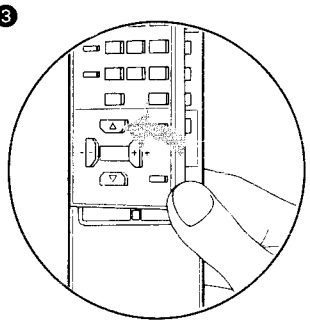
*Buttons ❶ and ❸ on the Remote Control have the same functions as buttons ❶ and ❸ on the front panel of the TV.

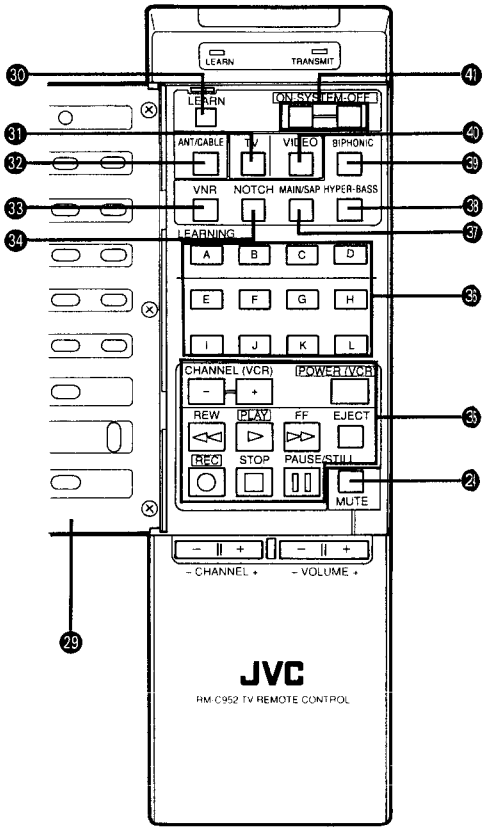
*Please refer to the above numbers on the following pages.



Remote Control Door is closed.

Opening the Remote Control Door





Remote Control Door is open.

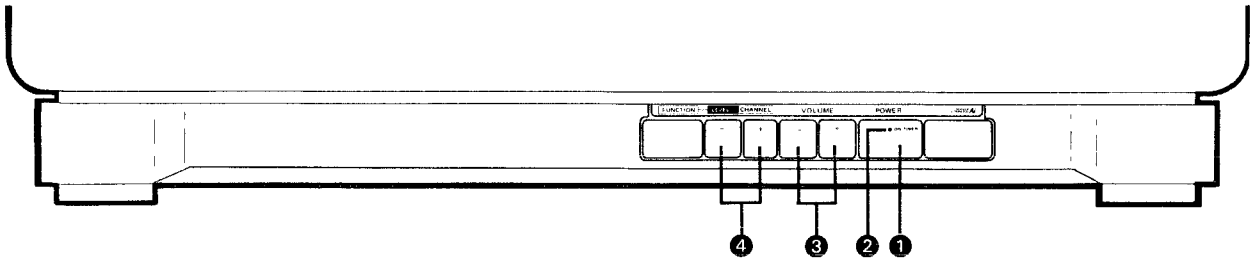
REMOTE CONTROL SECTION 1

- ⓯ TRANSMIT indicator
- ⓰ LEARN indicator
- ⓱ MENU button
- ⓲ VIEWER INDEX button
- ⓳ RETURN button
- ⓴ FUNCTION BACK button
- ㉑ FUNCTION (–/+) button
- ㉒ FUNCTION FORWARD button
- ㉓ CHANNEL (–/+) button
- ㉔ MUTE button
- ㉕ AV STATUS/RESET button
- ㉖ 100 + button
- ㉗ 10 Digit Keypad
- ㉘ DISPLAY button

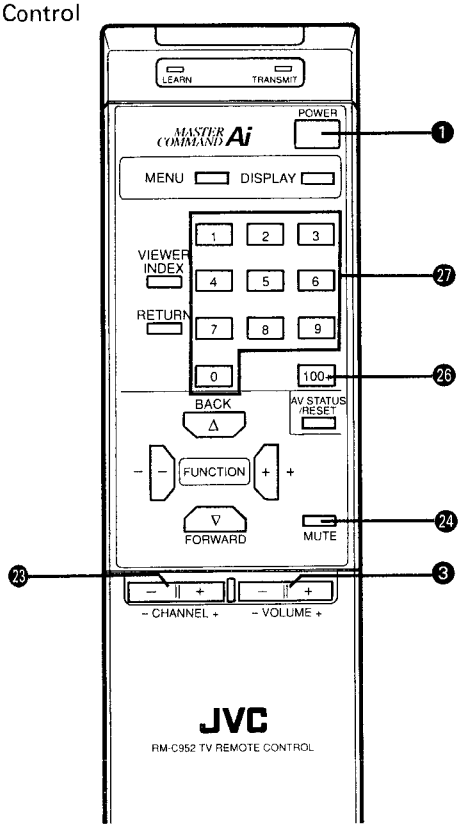
REMOTE CONTROL SECTION 2

- ㉙ Remote Control Door
- ㉚ LEARN button
- ㉛ TV button
- ㉜ ANT/CABLE button
- ㉝ VNR button
- ㉞ NOTCH button
- ㉟ VCR control buttons
- ㊱ LEARNING button
- ㊲ MAIN/SAP button
- ㊳ HYPER BASS button
- ㊴ BIPHONIC button
- ㊵ VIDEO button
- ㊶ SYSTEM (ON/OFF) buttons

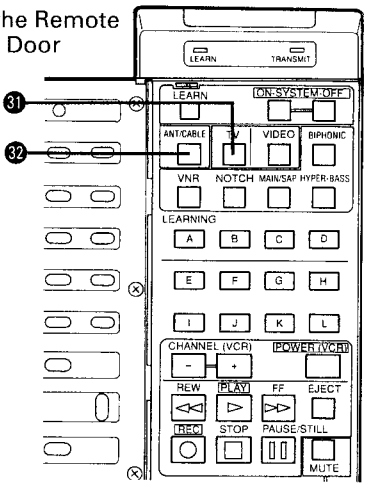
Front Panel



Remote Control



Under the Remote Control Door



First Preparations

- **Connect either Antenna or Cable TV** by following "Installation" instructions on page 3.
- Insert batteries into the Remote Control unit by following "Remote Control Use" instructions on page 3.
- **Connect the power cord** to 120 V, 60 Hz AC outlet. The power cord is supplied with a polarized plug. Therefore, it will only insert one way into the wall outlet. DO NOT DEFEAT THE POLARIZED PLUG. If you have difficulty, consult your local dealer.

CABLE TV CHANNEL CONVERSION CHART

In addition to normal TV reception from an antenna for VHF (Channels 2 – 13) and UHF (Channels 14 – 69), your TV set is equipped to receive non-scrambled cable TV channels. Sub-Mid band (A-8, A-4 – A-1), Mid band (A–I), Super band (J – W), Hyper band (W + 1 – W + 28) and Ultra band (W + 29 – W + 84) can be received by using the channel selections as shown in the following chart.

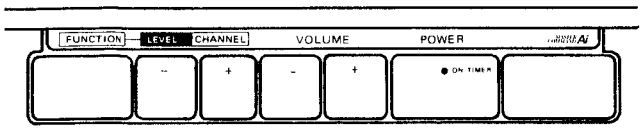
*	A-8	A-4	A-3	A-2	A-1	A	B	C	D	E	F	G	H	I	J	K	L	M	N
**	01	96	97	98	99	14	15	16	17	18	19	20	21	22	23	24	25	26	27
*	O	P	Q	R	S	T	U	V	W	W+1	W+2	W+3	W+4	W+5	W+6	W+7	W+8	W+9	W+10
**	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46
*	W+11	W+12	W+13	W+14	W+15	W+16	W+17	W+18	W+19	W+20	W+21	W+22	W+23	W+24	W+25	W+26	W+27	W+28	W+29
**	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65
*	W+30	W+31	W+32	W+33	W+34	W+35	W+36	W+37	W+38	W+39	W+40	W+41	W+42	W+43	W+44	W+45	W+46	W+47	W+48
**	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
*	W+49	W+50	W+51	W+52	W+53	W+54	W+55	W+56	W+57	W+58	W+59	W+60	W+61	W+62	W+63	W+64	W+65	W+66	W+67
**	85	86	87	88	89	90	91	92	93	94	100	101	102	103	104	105	106	107	108
*	W+68	W+69	W+70	W+71	W+72	W+73	W+74	W+75	W+76	W+77	W+78	W+79	W+80	W+81	W+82	W+83	W+84		
**	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125		

* : Regular cable channel designations
** : Your TV set's corresponding on-screen CABLE channel numbers

Note: Reception of channel A-5 ("95" of the TV set's on-screen CABLE channel numbers) is not recommended for your TV set.

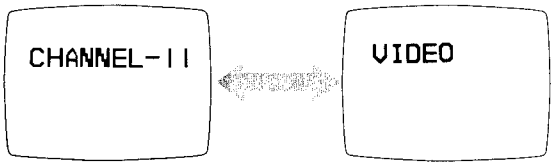
Basic Operating Procedure

1 **Press POWER button** ❶ on either the Remote Control or front panel. POWER/ON TIMER indicator ❷ lights. Press this button again to turn power off.

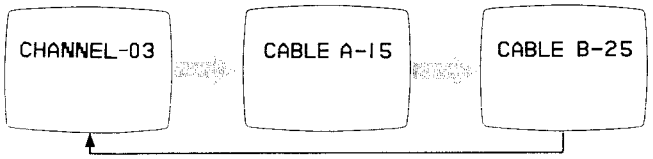


Note: If the POWER/ON TIMER indicator remains lit even after the power is turned off, it shows the ON TIMER is in operation. See "6. DUAL ON TIMER" on page 13 and "4. HOME SITTER" on page 11.

2 **Press TV button** ㉛ on the Remote Control (or the FUNCTION and LEVEL/CHANNEL (–/+) buttons on the front panel) to select the TV mode.



3 **Press ANT/CABLE button** ㉜ on the Remote Control to select the broadcast mode. Each time it is pressed, the mode is switched between "CHANNEL","CABLE A" and "CABLE B". When connected to an antenna, select "CHANNEL" mode for normal VHF/UHF reception. When connected to a non-scrambled cable TV system, select "CABLE A " mode. And when connected to a scrambled cable TV system via an additional converter, select "CABLE B" mode. (For connection to a converter, see INSTALLATION on page 3.) The on-screen display will show the following:

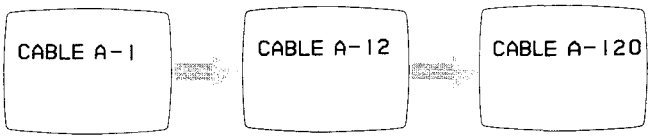


Note: For mode selection using the front panel controls, see "FUNCTION BUTTONS" on next page.

4 **Select desired channel** using CHANNEL (-/+) buttons ㉓ on the Remote Control (or LEVEL/CHANNEL (-/+) buttons ❹ on the front panel). Pressing the (+) button advances to higher channels, (-) button to lower channels.

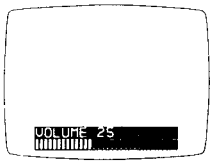
Note: Certain channels have been preset at the factory. It may be necessary to add or erase some channels in your areas. See "9. INITIAL SET-UP" on page 17 for presetting channels.

- Channels can be selected directly by using 10-Digit Keypad ㉗ on the Remote Control. For example, if you select channel 5, press "0" first, then press "5". (Be sure to press "0" first, before pressing "5" for channel 5.) For cable channels of 3-digit numbers, use 100+ button ㉖. For example, if selecting cable channel 120, press 100+ button first, then press "2", then "0". Also refer to the CABLE TV CHANNEL CONVERSION CHART on the left page.



Note: When a video source such as a VCR is connected to the antenna terminal to be viewed on Channel 3 (or Channel 4), sometimes channel selection may result in an unclear or distorted picture. In this case, re-select Channel 3 (or 4) and the picture will become clear. (Also in this case, be sure to press "0" first, before pressing "3" (or "4") for channel 3 (or channel 4).)

5 **Press VOLUME (-/+) buttons** ❸ on either the Remote Control or front panel to adjust volume to your desired listening level. Pressing the (+) button will increase sound volume, the (-) button will decrease sound volume. The volume level is indicated on the screen by reference numbers (0 – 50) and by a bar scale, as shown.



Note: The volume level can be muted instantly by pressing MUTE button ㉔ on the Remote Control. See "MUTE Button" on page 22.

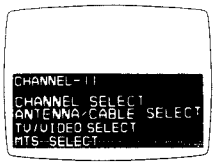
On-Screen Display

- Once the on-screen display appears on the screen, it disappears in a few seconds. (Only the clock time can be kept displayed on the screen. See "DISPLAY Button" on page 22.)
- When tuned to a channel where no program is being broadcast, the on-screen display may be unclear or blurred.
- On-screen displays are available in two different layouts (except for displays of the channel number and clock time). See "9. INITIAL SET-UP" on page 17 for selecting the display mode.
- Channel numbers of the "CHOICE channels" can be displayed with their station call letters. If you prefer to do so, enter the station call letters when you program the "8) SET VIEWER INDEX". See "9. INITIAL SET-UP" on page 17.

FUNCTION BUTTONS

The FUNCTION button on the front panel selects the control modes for TV operation and picture/sound adjustment.

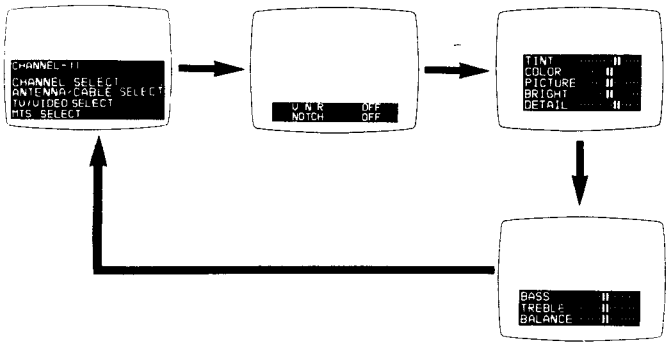
- Press FUNCTION button ❺ on the front panel. The first time it is pressed, the following display appears on the screen.



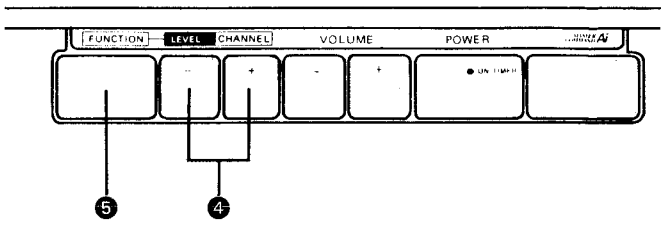
- At this time, the top line shows the current channel number.

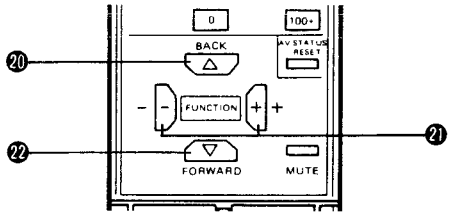
Press FUNCTION button ❺ to select the desired item for adjustment. Each time the FUNCTION button is pressed, the magenta-colored portion shifts in the order below to show that the colored item in the list can be adjusted.

Note: Four pages of on-screen displays are available with the FUNCTION button.



1. CHANNEL SELECT mode
2. ANTENNA/CABLE SELECT mode
3. TV/VIDEO SELECT mode
4. MTS SELECT mode
5. VNR ON/OFF mode
6. NOTCH ON/OFF mode
7. TINT adjustment mode
8. COLOR adjustment mode
9. PICTURE adjustment mode
10. BRIGHT adjustment mode
11. DETAIL adjustment mode
12. BASS adjustment mode
13. TREBLE adjustment mode
14. BALANCE adjustment mode





Note: The Remote Control's FUNCTION BACK button ⓴ or FORWARD button ㉒ selects **only picture and sound adjustment modes: TINT, COLOR, PICTURE, BRIGHT, DETAIL, BASS, TREBLE and BALANCE.** The other control modes can be selected directly with the Remote Control's respective buttons. Pressing FUNCTION FORWARD button ㉒ advances the colored portion in the order as shown on the left for "picture/sound adjustment modes", pressing FUNCTION BACK button ⓴ advances in the reverse order.

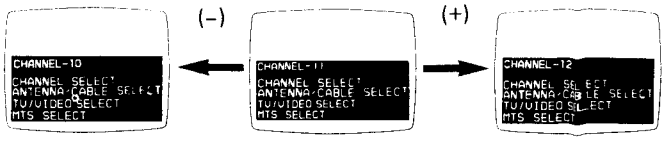
- After selecting the desired mode, press LEVEL/CHANNEL (-/+) buttons ❹ on the front panel or FUNCTION (-/+) buttons ㉑ on the Remote Control while the selected mode indication is being displayed to make your preferred adjustment. Remote Control FUNCTION (-/+) buttons ㉑ control **only picture and sound adjustments.**

Notes:

- When using the front panel buttons, before the FUNCTION button is pressed for the first time with nothing displayed on the screen, the TV is in the "CHANNEL SELECT" mode. Therefore, in this mode, channel selection is possible by pressing LEVEL/CHANNEL (-/+) buttons ❹ on the front panel.
- After completing picture and sound adjustments from the Remote Control, selecting either FUNCTION (-) or (+) button ㉑ will return directly to the last chosen adjustment mode.

1 CHANNEL SELECT mode

In this mode, press LEVEL/CHANNEL (+) button ❹ on the front panel to scan up the channels, and (-) button to scan down the channels.
(The screen illustrations below show the case when the TV is in the "CHANNEL" mode. When in the "CABLE" mode, the "CABLE" indication appears instead of "CHANNEL".)



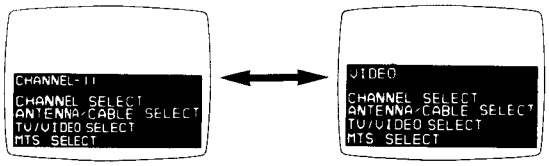
2 ANTENNA/CABLE select (broadcast) mode

In this mode, press LEVEL/CHANNEL (-/+) buttons ❹ on the front panel to change the broadcast mode among "CHANNEL" (for regular UHF/VHF channels), "CABLE A" (for non-scrambled cable channels) and "CABLE B" (scrambled cable channels).

3 TV/VIDEO SELECT mode

In this mode, press LEVEL/CHANNEL (-/+) buttons ❹ on the front panel to switch the mode between "TV" (for off-air or cable TV broadcasts) and "VIDEO" (for video source which is connected to the TV set's VIDEO/AUDIO INPUT connectors ❽ or S-VIDEO IN connector ⓮). See "CONNECTING TO EXTERNAL EQUIPMENT" on page30.

Note: Mode selection can be performed with TV button ㉛ on the Remote Control.



4 MTS SELECT mode

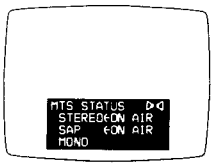
Your TV set incorporates an MTS (Multichannel Television Sound) decoder to receive stereo broadcasts and any accompanying SAP (Second Audio Program), such as a bilingual broadcast.

Available sound will be:

(1) Monaural (MAIN) audio program (regular broadcasts)
(2) STEREO (MAIN) audio program
(3) Second Audio Program (SAP)

In this mode, the "← ON AIR" shows which MTS mode is now being broadcast. Press LEVEL/CHANNEL (-/+) buttons ❹ to change the reception mode among "STEREO", "SAP" and "MONO".

Each time it is pressed, the color of the indication changes from blue to magenta to show that the mode has just been switched.



Notes:

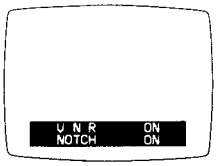
- Mode selection can be performed with MAIN/SAP button ㊲ . Each time it is pressed, the mode changes in the order of "STEREO" – "SAP" – "MONO" – "STEREO".
- If the TV set is kept always set to the stereo mode, when a stereo broadcast is received, stereo sound is output automatically.
- If the received stereo signal is weak, noise may be heard. In such a case, press LEVEL/CHANNEL (-/+) buttons ❹ (or MAIN/SAP button ㊲) to engage the MONO mode for better sound reception.
- If the received SAP signal is weak, the SAP will not be heard. Select the MONO mode for better sound reception.
- Even if both stereo and SAP broadcasts are received, both broadcasts cannot be heard at a time.

When using the TV set for cable reception

Transmission of Cable TV signals may differ from off-air TV broadcasts. It is possible that the multichannel TV sound (MTS) may not be received satisfactorily.

5 – 6 VNR/NOTCH ON/OFF modes

In these modes, press LEVEL/CHANNEL (-/+) buttons ❹ on the front panel to switch on and off the VNR and NOTCH functions. For details on those functions, see "MORE USEFUL FUNCTIONS" on page22.

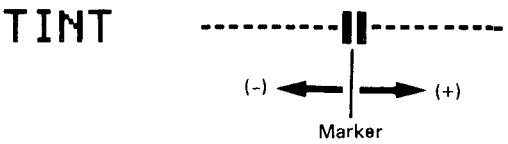


7 – 14 Picture/sound adjustment modes

In these modes, an adjustment scale with a marker appears on the screen. Press LEVEL/CHANNEL (-/+) buttons ❹ on the front panel or FUNCTION (-/+) buttons ㉑ on the Remote Control to fine adjust each item to your preference according to the chart below. (The center position is only a reference level, rather than a standard setting.)

(-)	Item	(+)
Reddish	TINT	Greenish
Subdued	COLOR	Vivid
Light	PICTURE	Strong
Dark	BRIGHT	Bright
Soft	DETAIL	Sharp
Soft	BASS	Strong
Soft	TREBLE	Strong
Left	BALANCE	Right

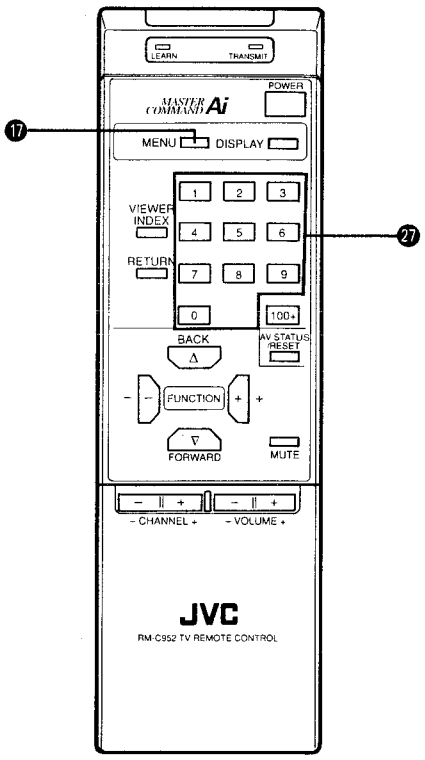
Note: When you wish to restore all adjustment modes to their scale's center position, use AV STATUS/RESET button ㉕ . For details, see "AV STATUS/RESET button" on page19.

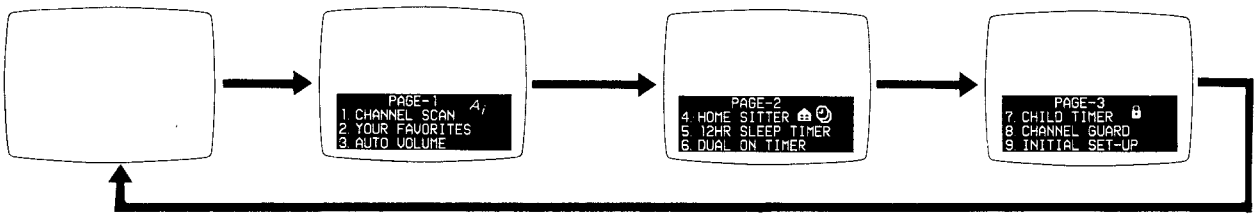


MENU BUTTON

The "MENU" button selects a list of functions that can be programmed for operating the TV more conveniently. This function is possible only on the Remote Control.

- Press MENU button ⑰ on the Remote Control to display the list of programmable convenience functions on the screen. The "MENU" consists of 3 pages. Press the MENU button repeatedly to display the pages in the sequence below.
- Press numbers "1" through "9" on 10-Digit Keypad ㉗ to select the corresponding function in the numbered "MENU".



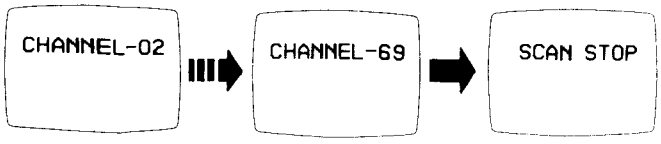


PAGE-1

1. CHANNEL SCAN

This feature allows automatic scanning, in ascending order, of the channels which have been stored following the procedures of "9. INITIAL SET-UP" (described on page 13).

1) With "PAGE-1" MENU displayed on the screen, press "1" of 10-Digit Keypad ㉗ .
   - All memorized channels (either "CHANNEL" or "CABLE A" or "CABLE B" mode) will now be scanned sequentially in ascending order beginning with the channel that the TV is tuned to. Scanning will stop automatically when the original channel is reached. "SCAN STOP" appears to show the CHANNEL SCAN mode has finished.



2) Press any button on the Remote Control, if you wish to stop scanning at a certain channel before the original channel is reached.
   To resume scanning, press MENU button ⑰ and then "1" of 10-Digit Keypad ㉗ .

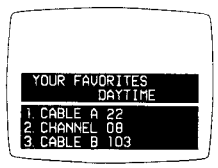
Notes:

- When the TV is in the "CABLE A" or "CABLE B" mode, the "CABLE A" or "CABLE B" indication appears on the screen instead of "CHANNEL".
- For changing memorized channels, see "9. INITIAL SET-UP".
- If you wish to start CHANNEL SCAN at a specific channel, first select the broadcast mode (CHANNEL or CABLE A or CABLE B) then that channel number, and then follow instructions on the left.
- While actual CHANNEL SCAN is being performed, all front panel buttons become inoperable.
- In the VIDEO mode, if the CHANNEL SCAN menu is selected, the mode is switched to the TV mode; the CHANNEL SCAN function does not operate in the VIDEO mode.

2. YOUR FAVORITES

This feature displays Real Channels in two categories, "DAYTIME" and "EVENING", by ranking the three most-frequently-viewed channels in each category. Any of the channels displayed on the screen can also be tuned to directly using the 10-Digit Keypad ㉗.

1) With "PAGE-1" MENU displayed on the screen, press "2" of 10-Digit Keypad ㉗. The display will show:



(Sample of channel ranking)

2) While the above is being displayed, a channel can be directly tuned to by pressing "1", "2" or "3", corresponding to the number indicating the channel you wish to view.

Notes:

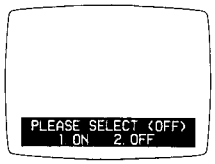
- When the clock has not been set or is not operating, the YOUR FAVORITES function cannot be operated.
- "DAYTIME" is from 4:00 a.m. to 5:59 p.m. "EVENING" is from 6:00 p.m. to 3:59 a.m. Only the three most-frequently-viewed channels of the current time span ("DAYTIME" or "EVENING") are displayed on the screen.

---

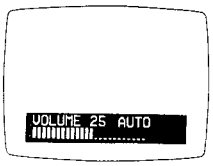
3. AUTO VOLUME

This feature automatically adjusts the volume level to suit different times of the day. (For example, "VOLUME 20" for daytime and "VOLUME 12" for nighttime.) When AUTO VOLUME is set to ON, the volume level changes over five days are memorized and, from the sixth day, the volume level is automatically adjusted while memorizing continues.

1) With "PAGE-1" MENU displayed on the screen, press "3" of 10-Digit Keypad ㉗. The display will show:



2) Press "1" to set the AUTO VOLUME function to ON. (Press "2" for OFF.)
   - While AUTO VOLUME is ON, the following "AUTO" indication appears on the upper part of the volume level reference scale.



Notes:

- When the clock has not been set or is not operating, the AUTO VOLUME function cannot be operated. Also, for five days after the clock has been set, AUTO VOLUME does not operate, since that amount of time is required for storing the data of volume levels for each period of time in memory. (When power is off, or the muting function is operated, or the clock is not operating, or audio volume controls are adjusted, the volume level data is not stored in memory.)
- For 30 minutes after an audio volume setting, AUTO VOLUME does not operate.
- Adjustments of volume levels are limited to within ±5 to prevent an abrupt, extreme change in volume level.
- Automatic volume adjustment is performed every hour.

PAGE-2

4. HOME SITTER

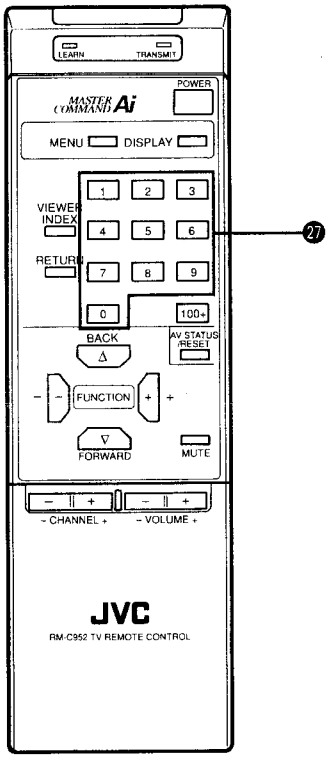
The "HOME SITTER" feature enables the TV to be turned on and off automatically at preset times every day.

With "PAGE-2" (or "PAGE-1" or "PAGE-3") MENU displayed on the screen, press "4" of 10-Digit Keypad ㉗. The display will show:

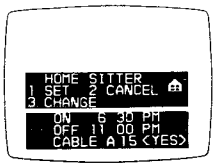
- At this time, if the display of "POWER INTERRUPTED/ WOULD YOU SET CLOCK FIRST? appears, it shows that the clock is not operating, and the HOME SITTER will not function.
  Press "1" (YES) to set the clock. (If "2" (NO) is pressed, the message "YOU CANNOT OPERATE HOME SITTER!!" is displayed.)
  Set the clock. See "3) SET CLOCK" of "9. INITIAL SET-UP" on page 17 for details regarding clock setting. After setting the clock, the message "THANK YOU!!" appears to show that the clock has just been adjusted and the HOME SITTER is now ready to be set.

1) SET

Press "1" to place the HOME SITTER in standby. The ON/OFF time and channel number which have been previously set will be displayed. When the POWER button is pressed to turn the TV off, POWER/ON TIMER indicator ❷ lights and "YES" appears on the screen to show that the HOME SITTER is in operation.



When the channel number is set, the display will show:



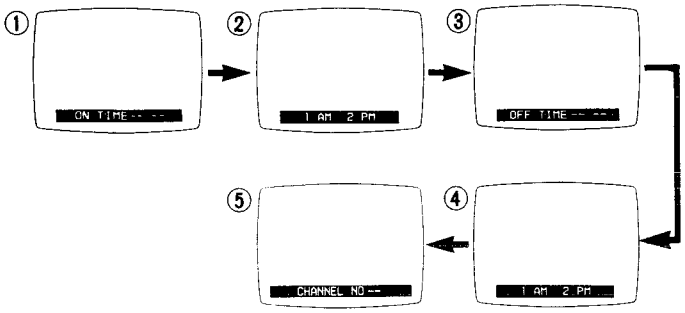
- This display shows that the HOME SITTER is set to switch the TV on at 6:30 PM, switch it off at 11:00 PM and the channel to be received is "CABLE A 15".

2) CANCEL

Press "2" to cancel the HOME SITTER. "NO" appears to show that the HOME SITTER has been canceled.

3) CHANGE

Press "3" to re-adjust the HOME SITTER setting. Follow the on-screen displays to set the switch-on time, switch-off time and channel number, using the 10-Digit Keypad ㉗.



① Set the switch-on time.
② Select "AM" or "PM".
③ Set the switch-off time.
④ Select "AM" or "PM".
⑤ Set the channel number.

Notes:

- If an invalid time or channel number is selected, it will be rejected and it must be reset properly.
- If you wish to reset the switch-on time only, stop keying in data (waiting until the on-screen display disappears) after keying in the AM/PM setting, or press keys other than the 10-Digit Keypad. And, if you wish to reset the switch-on and switch-off time only, the procedure is the same.
- The function that automatically turns the TV off for the ON TIMER, if no TV operation is performed after 2 hours, does not operate for the HOME SITTER.
- If the power is disconnected (such as in a power failure, etc.), and reapplied later, the HOME SITTER will be canceled. When disconnected only for a couple of minutes, the HOME SITTER is reactivated; however, it turns the TV on and off later than the set time by the amount of time of interruption.
- If the channel which has already been set as a "Guarded Channel" is selected, that channel is rejected and cannot be set for the HOME SITTER. (For details of the Guarded Channels, see page 15.)

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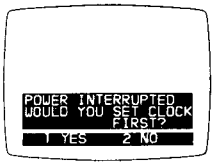
5. 12HR SLEEP TIMER

The "12HR SLEEP TIMER" feature allows you to turn off your TV automatically at a preset time.

1) With "PAGE-2" (or "PAGE-1" or "PAGE-3") MENU displayed on the screen, press "5" of 10-Digit Keypad ㉗.
The display will show:

- If the built-in clock has not been set to operate properly, the 12HR SLEEP TIMER will not function. In this case, the following display will appear on the screen to show that the clock requires adjustment.



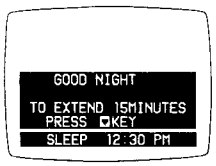
Press "1" (YES) of the 10-Digit Keypad to adjust the clock. (If "2" (NO) is pressed, the warning message "YOU CANNOT OPERATE SLEEP TIMER!!" is displayed.)
Set the built-in clock. (See "3) SET CLOCK" of "9. INITIAL SET-UP" on page 18 for details.) When the clock is adjusted, the message "THANK YOU!!" appears. Then, the following display appears to show that the SLEEP TIMER is now ready to be set.

2) Press the numbers on the 10-Digit Keypad to set the desired switch-off time. The 12HR SLEEP TIMER can be set for up to 11 hours 59 minutes from the current time.
For example, if it is now 7:00 PM, and you want the TV to switch off automatically at 9:00 PM, press "9", "0" and "0". (The "AM/PM" setting is done automatically.) The selected time of "9:00 PM" appears.

- When you select "1" for hour setting (for example, "1:05 AM"), remember to press "0" first, then press "1", "0" and "5".

3) To cancel the 12HR SLEEP TIMER setting, key in the current time (the current time setting of the TV's built-in clock).

Notes:
- If an invalid time is selected (for example: "5:87"), it will be rejected and the 12HR SLEEP TIMER must be reset properly.
- While the 12HR SLEEP TIMER is activated, if the POWER button is pressed to turn the power off and on again, the 12HR SLEEP TIMER will be canceled.
- While the 12HR SLEEP TIMER is activated, if the power is disconnected (such as in the case of power failure, etc.) and reapplied later, the TV is turned off. When disconnected only for a couple of minutes, the 12HR SLEEP TIMER is re-activated; however, it turns the TV off later than the set time by the amount of time of interruption.
- The 12HR SLEEP TIMER may turn off the TV a little earlier than the preset time.
- When the remaining time reaches 1 minute, the following message appears for a few seconds and "GOOD NIGHT" continues to blink. While the display remains on the screen, each pressing of the FUNCTION FORWARD button (▼) on the Remote Control will delay the turn-off time by 15 minutes.



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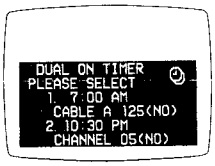
6. DUAL ON TIMER

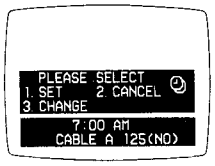
The "DUAL ON TIMER" feature allows you to turn on your TV automatically at a preset time and on a specific channel. The DUAL ON TIMER is available for 2 different settings.

With "PAGE-2" (or "PAGE-1" or "PAGE-3") MENU displayed on the screen, press "6" of 10-Digit Keypad ⑥ . The display will show:



- At this time, if the display of "POWER INTERRUPTED/ WOULD YOU SET CLOCK FIRST?" (which may appear during the 12HR SLEEP TIMER procedure) appears, it shows that the clock is not operating, and the DUAL ON TIMER will not function.
Press "1" (YES) to set the clock. (If "2" (NO) is pressed, the warning message "YOU CANNOT OPERATE ON TIMER!!" is displayed.)
Set the clock. See "3) SET CLOCK" of "9. INITIAL SET-UP" on page 18 for details regarding clock setting. After the clock has been set, the message "THANK YOU!!" appears to show that the clock has just been adjusted and the DUAL ON TIME is now ready to be set.

Two different settings are possible. Press "1" or "2" to select the setting position. The display will show:

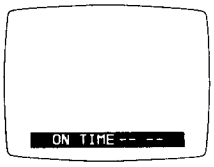


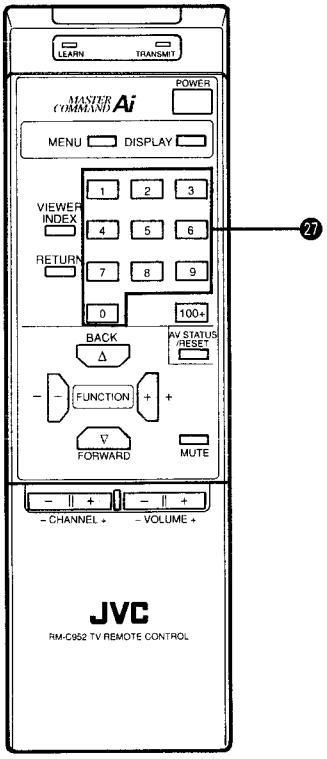
- The second from the bottom line shows the preset time if already previously set.

1) SET
Press "1" to start the DUAL ON TIMER for turning the TV on automatically at the preset time shown. "<YES>" appears to show that the DUAL ON TIMER has started.

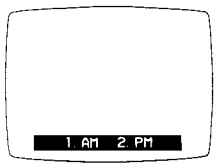
2) CANCEL
Press "2" to cancel the setting. "<NO>" appears to show that the DUAL ON TIMER has been canceled.

3) CHANGE
Press "3" to re-adjust the setting. Then, the following display appears.

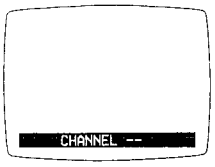




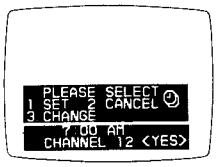
Press the numbers on the 10-Digit Keypad ㉗ to set the desired switch-on time. For example, if you want the TV to switch on automatically for CHANNEL 12 at 7:00 AM, press "7", "0" and "0". (When you select "1" for hour setting, remember to press "0" first, then press "1".) The selected time of "7:00" appears and immediately the display changes to:



Then, press "1" to select the "AM" setting. (Press "2" to select the "PM" setting.) Then, the following display appears. Press "1" and "2" for specifying "CHANNEL 12".



Now the following display appears on the screen to show the DUAL ON TIMER is set to "7:00 AM, CHANNEL 12" with the <YES> indicating the DUAL ON TIMER has started. Finally, press POWER button ❶ to turn the power off. POWER/ON TIMER indicator ❷ remains lit to show that the DUAL ON TIMER is in operation.



Notes:

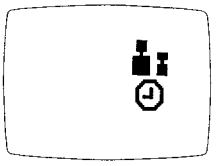
- If an invalid time is selected (for example: "17:70"), it will be rejected and the DUAL ON TIMER must be reset properly.
- After the DUAL ON TIMER has been properly set, it functions only once for each setting (up to 2 settings are possible) to turn on the TV's power. (It does not operate repeatedly every day at the same time as a serial time.)
- Once the DUAL ON TIMER turns the TV on automatically, if the TV is not operated in any way, after 2 hours the TV will turn off automatically for safety. A single adjustment, even audio level adjustment or channel selection, will cancel this switch-off function.
- While the DUAL ON TIMER is activated, if the power is disconnected (such as in the case of power failure, etc.) and reapplied later, the DUAL ON TIMER is canceled. When disconnected only for a couple of minutes, the DUAL ON TIMER is reactivated; however, it turns the TV on later than the set time by the amount of time of interruption.
- If the channel which has already been set as a "Guarded Channel" is selected, that channel is rejected and cannot be set for the DUAL ON TIMER. (For details of the Guarded Channels, refer to page 15.)
- If timer 2 is set to (NO), timer 1 is also set to (NO). To set timer 1 only to (YES) when timers 1 and 2 are both (YES), set timer 2 to (NO), then set timer 1 to (YES) again.

PAGE-3

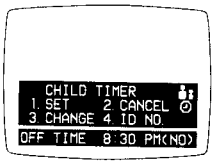
7. CHILD TIMER

The "CHILD TIMER" feature enables the TV to be turned off automatically at a preset time every day, and once it has been set, it continues to operate unless it is canceled. Different from the 12HR SLEEP TIMER, the CHILD TIMER not only turns off the TV, but if the power is reapplied later, only a blue-blank screen appears instead of a normal screen. At this time, an ID number must be entered; when a correct ID number is entered, the blue-blank screen changes to a normal one. Also after an hour has passed, the function is canceled automatically.

With "PAGE-3 (or "PAGE-1" or "PAGE-2") MENU displayed on the screen, press "7" of 10-Digit Keypad ㉗ . The display will show:



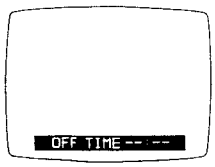
Then, press "0". The display changes to:



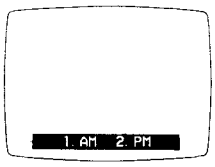
1) SET
Press "1" to place the CHILD TIMER in standby. The OFF TIME which has been previously set will be displayed. "YES" appears on the screen to show that the CHILD TIMER is in operation.

2) CANCEL
Press "2" to cancel the CHILD TIMER. "NO" appears to show that the CHILD TIMER has been canceled.

3) CHANGE
Press "3" to re-adjust the CHILD TIMER setting. Follow the on-screen displays to reset the OFF TIME, using the 10-Digit Keypad ㉗.

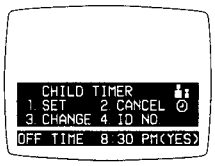


Set the OFF TIME.

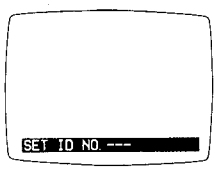


Select "AM" or "PM".

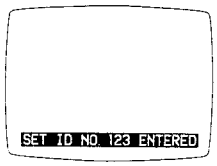
When the OFF TIME is set, the display will show:



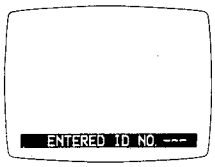
4) SET ID NO.
Press "4" to set the ID number. The display will show:



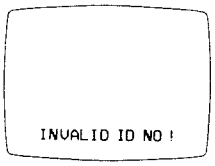
Press any of 3 numbers you wish to be the ID number. When completed, "ENTERED" appears to show that the ID number you have just keyed in is set.



CHILD TIMER operation
1) When the POWER button is pressed after the CHILD TIMER has already turned the power off, the following display appears.



2) Key in the ID number using the 10-Digit Keypad ㉗. Then the blue-blank screen will change to a normal screen.
3) If the keyed-in ID number is incorrect, the display shows:



And the blue-blank screen will remain.

Notes:
- If you wish to change the ID number, follow the steps of "3) SET ID NO.".
- If the power is disconnected (such as in the case of power failure, etc.), and reapplied later, the ID number is reset to "000".
- If you forget the ID number which you have set, reset it.
- Since the ID number for the CHILD TIMER and CHANNEL GUARD is the same, changing one will also automatically change the other.

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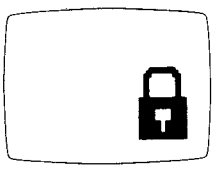
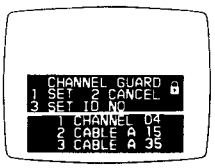
8. CHANNEL GUARD

The "CHANNEL GUARD" feature allows you to assign an "ID number" to specific channels of your choice, making them "Guarded Channels". This prevents these specific channels from being selected, unless the "ID number" is keyed in.

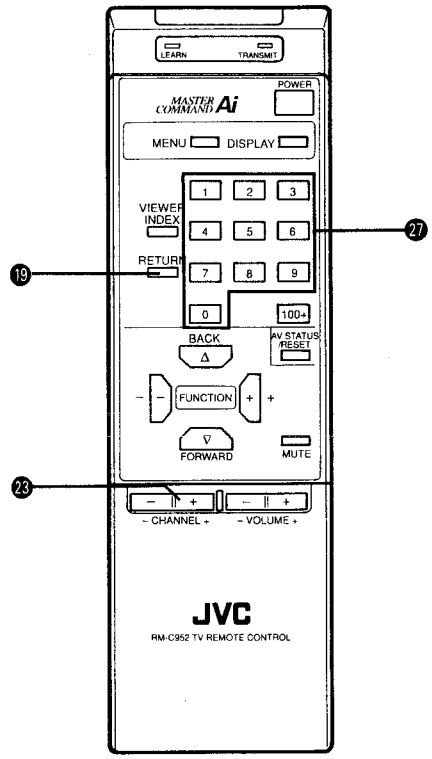
First select a channel you wish to set as a Guarded Channel. With "PAGE-3" (or "PAGE-1" or "PAGE-2") MENU displayed on the screen, press "8" of 10-Digit keypad ㉗. The display will show:



Then, press "0". The display changes to:

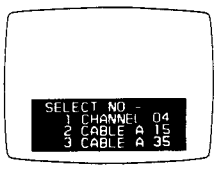


- Channel numbers displayed are the Guarded Channels, if already previously set.

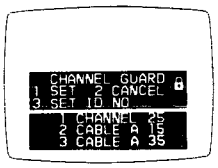


1) SET

Press "1". The display changes to:

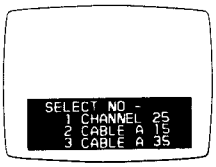


For example, if the current channel being received is "CHANNEL 25", and you wish to store this channel as Guarded Channel 1, then press "1". The display changes to show that CHANNEL 25 is now set as Guarded Channel 1.

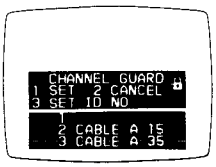


2) CANCEL

Press "2" to cancel the Guarded Channel. The display will show:

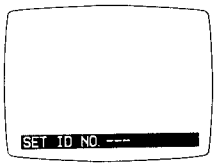


With this display on the screen, press the number of the Guarded Channel you wish to cancel from the list. For example, if you wish to cancel CHANNEL 25 (in this case, Guarded Channel 1) from the list, press "1". Then the display changes to show that CHANNEL 25 (Guarded Channel 1) has been canceled.

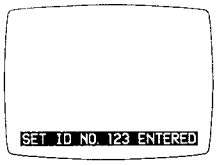


3) SET ID NO.

Press "3" to set the ID number. The display will show:

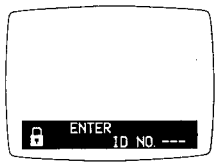


Press any 3 digits you wish to be the ID number. When completed, "ENTERED" appears to show that the ID number you have just keyed in is set.

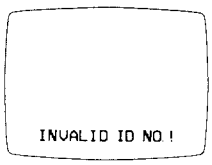


Viewing Guarded Channels

1) Select the Guarded Channel. (If the Guarded Channel you wish to view is CHANNEL 25, press "2" and "5".) Then, the following display appears:



2) Key in the ID number using the 10-Digit Keypad ㉗. The channel appears.
3) If the keyed-in ID number is incorrect, the display shows:



And the Guarded Channel you have selected cannot be seen.

Notes:

- If you wish to change the ID number, follow the steps of "3) SET ID NO.".
- If the power is disconnected (such as in the case of power failure, etc.), and reapplied later, the ID number is reset to "000".
- When performing the CHANNEL SCAN function, or selecting channels using CHANNEL (-/+) buttons ㉓, the Guarded Channels are skipped.
- In the following cases, the Guarded Channel can be seen without keying in the ID number:
  =When you press RETURN button ⑲ from a channel which has been selected immediately after viewing a Guarded Channel.
  =When you press ANT/CABLE button ㉝ from a channel of a different broadcast mode (CHANNEL or CABLE) which has been selected immediately after viewing a Guarded Channel.
  =When you press CHANNEL (-/+) buttons ㉓ on the Remote Control or LEVEL/CHANNEL (-/+) buttons ❹ on the front panel, while in the MANUAL PROGRAM mode of the INITIAL SET-UP (on MENU PAGE-3), if the selected channel which has already been ADDed happens to also be a Guarded Channel.

=When you press "4" (CHANNEL UP) or "5" (CHANNEL DOWN) of the 10-Digit Keypad while in the MANUAL PROGRAM mode of the INITIAL SET-UP, if the Guarded Channel happens to also be the next higher or lower channel following the one to which you are presently tuned.

=While in the AUTO PROGRAM mode of the INITIAL SET-UP, if the AUTO PROGRAM is interrupted immediately when a Guarded Channel appears.

=When the channel which has already been set for the DUAL ON TIMER or HOME SITTER is set as a Guarded Channel.

- If you forget the ID number which you have set, reset it.

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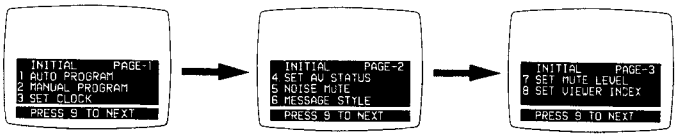
9. INITIAL SET-UP

The INITIAL SET-UP feature allows you to perform basic settings for the TV status. This consists of Channel Memory (Auto/Manual), Set Clock, Set AV Status, Noise Mute, Message Style, Set Mute Level and Set Viewer Index.

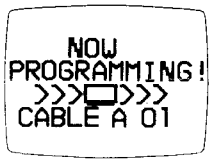
- With PAGE-3 (or PAGE-1 or PAGE-2) MENU displayed on the screen, press "9" of 10-Digit Keypad ㉗. The "INITIAL SET-UP" consists of 3 pages. Press "9" of 10-Digit Keypad ㉗ or the MENU button repeatedly to display the pages in the sequence below.
- Press numbers "1" through "8" on 10-Digit Keypad ㉗ to select the corresponding function of the numbered items.



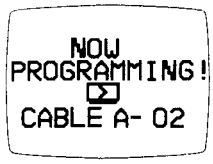
1) AUTO PROGRAM

This function allows memorizing the channels automatically to match the TV broadcasts and cable channels of your area. The memorized channels can be selected by CHANNEL (-/+) buttons ㉓ on the Remote Control or LEVEL/CHANNEL (-/+) buttons ❹ on the front panel, or in the CHANNEL SCAN mode, while skipping channels where there are no broadcasts.

Press "1" of the 10-Digit Keypad. The following display will appear and the program set-up procedure begins automatically.



When tuned to a channel in which a TV program is broadcast, the following display appears and this channel is memorized.



When the AUTO PROGRAM procedure (scanning and memorizing) is completed, it will be indicated by the following display.

Notes:

- If the broadcast signals are weak, the channel may not be memorized. In this case, perform the MANUAL PROGRAM procedure.
- The AUTO PROGRAM procedure takes approximately 4 minutes. If you wish to stop this procedure before completion, press any button on the Remote Control.

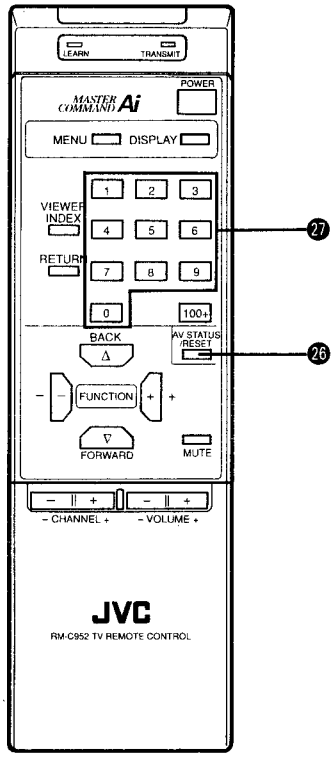
2) MANUAL PROGRAM

Similar to the AUTO PROGRAM function on the previous page, this is for memorizing channels, but it is performed manually. The resulting Manual Programming is also effective when performing up/down channel selection or CHANNEL SCAN. Press "2". The display will show:

The current tuned-in channel

Simply follow the on-screen instructions.

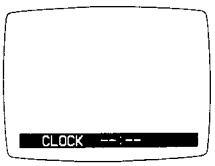
1) Press "1" (ADD) to add this channel in memory. A bar "-" will appear between the broadcast mode (CHANNEL or CABLE) and the channel number to show that the channel has been memorized.
2) Press "2" (ERASE) to erase this channel from memory, if you do not wish to preset it in memory or if no TV station is broadcasting on it. The bar between the broadcast mode and channel number will disappear.
3) Press "4" (CHANNEL UP) or "5" (CHANNEL DOWN) to select the next higher or lower channel.
4) Press "3" (END) when you have stored all required channels in memory.
5) When you wish to store channels of the other broadcast mode, select the mode first, then repeat steps 1) through 4).
   - In step 3) above, if selecting channels is difficult, press the CHANNEL (-/+) buttons on the Remote Control.
   - Be sure to perform these operations using the Remote Control.



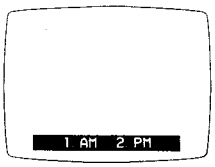
3) SET CLOCK

Your TV has a built-in clock. Set the clock as follows.

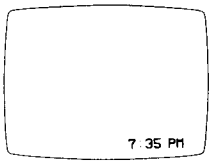
1) Press "3" of 10-Digit Keypad ㉗ . The display will show:



2) Then, press the numbers on the 10-Digit Keypad to set the current time. For example, if the present time is 7:35 PM, press "0", "7", "3" and "5" (or press "7", "3" and "5"). Then, the display changes to:



3) Press "2" to select the "PM" setting. (Press "1" to select the "AM" setting.) Then, the display changes to the following to show the current time is set and the clock starts operating.



Notes:

- If an invalid time is selected (for example: "17:70"), it will be rejected and the built-in clock must be reset properly.
- If you wish to set the clock precisely, in step 3) above, press "2" (or "1") at the same instant of a time signal.
- The built-in clock may loose time depending on the manner in which the TV is used or the frequency of the power source. If the time difference becomes great, re-adjust the clock.
- If the power is disconnected (such as in the case of a power failure, etc.), and reapplied later, the clock will stop operating. (The clock status can be checked on the screen. Press the DISPLAY button. If the clock has stopped, the message "CLOCK STOPPED" is displayed instead of the current time. See "DISPLAY Button" on page 22 for details.) When disconnected only for a couple of minutes, the clock is reactivated; however, it will be later than the actual time by the amount of time of interruption.

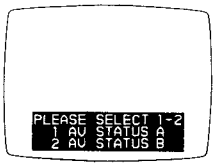
4) SET AV STATUS

Your TV set incorporates the AV STATUS memory that can store 2 variations for preset picture/sound adjustments, allowing you to change the picture/sound tone/speaker balance to your preference, depending on each source.

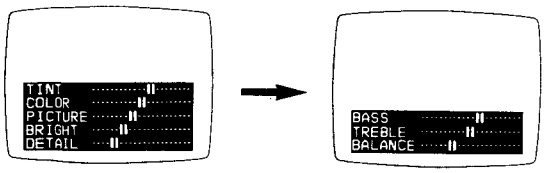
1) Press "4" of 10-Digit Keypad ㉗ . The display will show:

2) Make picture adjustments to your preference. Use the FUNCTION BACK/FORWARD buttons to select the item, and use the FUNCTION (-/+) buttons to adjust each item. If you also wish to make sound adjustments, press "1" to advance the adjustment mode display. The following display will appear. (Press "1" again to return to the picture adjustment display.)

3) Make sound adjustments to your preference. Use the FUNCTION BACK/FORWARD buttons to select the item, and use the FUNCTION (-/+) buttons to adjust each item. When finished, press "2". The following display will appear.



4) Press "1" to store the setting as the "AV STATUS A". (Press "2" to store it as the "AV STATUS B".) Then the picture and sound adjustment settings (items and their reference scales) appear for a few seconds each.

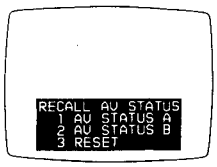


5) Repeat steps 1) through 4) for making another AV STATUS setting.

Note: When you wish to choose the preset AV STATUS, just press AV STATUS/RESET button ㉖ to choose either set of AV STATUS adjustments. For details, see "AV STATUS/RESET button" below.

AV STATUS/RESET button

Use this button for choosing the preset AV STATUS or for resetting the picture/sound adjustment items.
Press AV STATUS/RESET button ㉖ on the Remote Control. The following display appears.



- Another pressing of the AV STATUS/RESET button resets all previously adjusted items to their center positions.

1. AV STATUS A

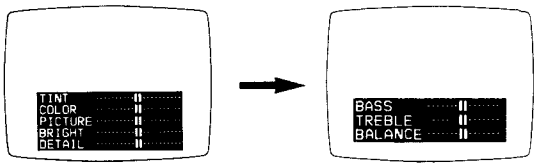
Press "1" of 10-Digit Keypad ㉗ for selecting AV STATUS A. The picture and sound change as preset for "AV STATUS A". Then the picture and sound adjustment settings (items and their reference scales) appear for a few seconds each.

2. AV STATUS B

Press "2" for selecting AV STATUS B. The picture and sound change as preset for "AV STATUS B". Then the picture and sound adjustment settings (items and their reference scales) appear for a few seconds each.

3. RESET

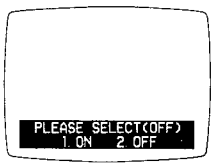
Press "3" when you wish to reset all adjusted items (TINT, COLOR, PICTURE, BRIGHT, DETAIL, BASS, TREBLE and BALANCE) back to their center positions at the same time. The on-screen displays appear and change as follows:



Note: While in this mode, the setting of the AV STATUS cannot be canceled.

5) NOISE MUTE

The NOISE MUTE feature allows replacing the "snowy" screen of vacant non-broadcast channels with a blue-blank screen; and, at the same time, muting the noisy sound.
Press "5". The display will show:



At this time, either current setting (<ON> or <OFF>) is indicated at the right of "PLEASE SELECT".

Press "1" to select the Noise Mute mode for a blue-blank screen with no sound.

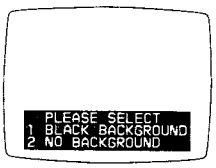
Press "2" to release the mode. Screen is normal (without blue-blank screen) and sound can be heard.

Note: The Noise Mute mode can be activated only when either no signal is being input or when a weak signal is being received.

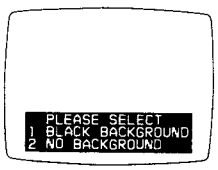
- If you wish to view a TV program having a weak broadcast signal, release the Noise Mute mode to prevent it from being activated.
- If you use an antenna system, before adjusting it (extending, rotating, etc.), release the Noise Mute mode to prevent it from being activated when the signal condition changes.
- When playing back VCR recordings or the like, picture and sound muting conditions might continue to occur for a few seconds after engaging the Play mode. Release the Noise Mute mode when necessary.
- When the Noise Mute mode is engaged, it is also applied to the output signals, both from LINE OUT connectors and from AUDIO OUT (VARIABLE) connectors. Release the Noise Mute mode to prevent it from having effect when connecting external components to the TV.

6) MESSAGE STYLE

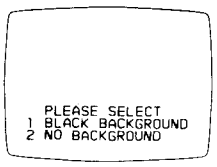
This function is for switching the black background of the on-screen display on and off (except for channel numbers and clock time.) Press "6". The display will show:

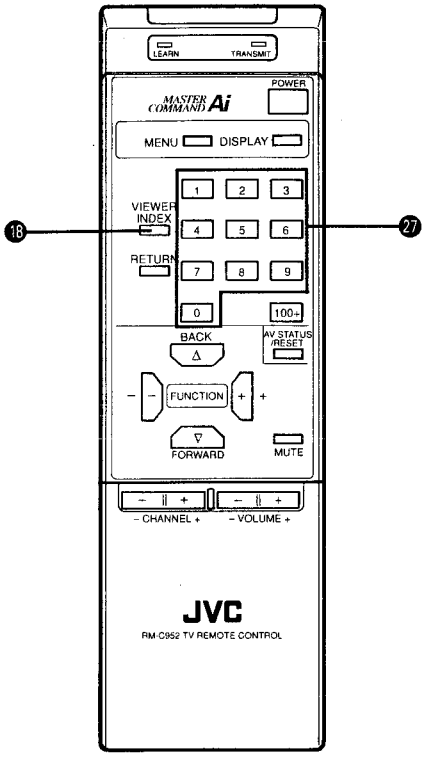


Press "1" to select the on-screen display mode with a black background.



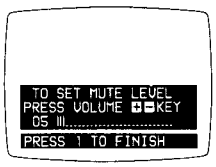
Press "2" to select the on-screen display mode without a black background.





7) SET MUTE LEVEL

This feature allows presetting the sound level of the mute function. Press "7" of 10-Digit Keypad ㉗ . The display will show:



Press the VOLUME (–/+) buttons to preset a mute level. Then press "1" to complete the setting.

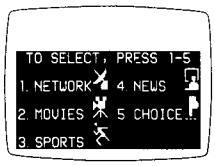
Note:

- If the preset mute level is greater than the current volume level, pressing the MUTE button makes the volume level "00".

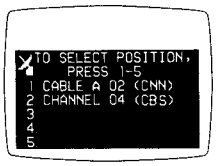
8) SET VIEWER INDEX

This function enables storing up to five frequently-viewed channels for five different categories (Network, Movies, Sports, News and Choice) under "Viewer Index", allowing immediate, direct access to the channel of your choice by using VIEWER INDEX button ⑱ .

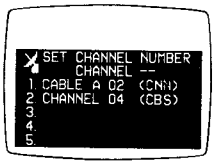
1) While in the channel select mode (either "CHANNEL" or "CABLE A" or "CABLE B" mode), determine the category and channel you wish to preset under "Viewer Index".
2) Press "8" of 10-Digit Keypad ㉗. The display will show:



3) Press a number (1 – 5) on 10-Digit Keypad ㉗ for a category in which you wish to preset a channel. Then, the following display will appear.
(For example, press "1" to select "Network".)

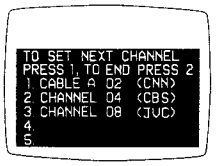


4) Press a number (1 – 5) of 10-Digit Keypad ㉗ for a position in which you wish to preset a channel. Then, the following display will appear.
(For example, press "3" to select position 3.)



5) Enter a channel you wish to preset (either in the CHANNEL or in the CABLE A or CABLE B modes).
(For example, press "0" and "8" to preset "CHANNEL 08".)

6) Press either FUNCTION FORWARD/BACK (▼/▲) button for selecting each of the call letters to be stored. Available characters include the alphanumeric characters (26 English-language letters and 10 numerals), plus various punctuation marks (period, comma, etc.). Then, move the cursor to the next letter position by pressing either FUNCTION (–/+) button on the Remote Control. When the selection of as many as 4 call letters is finished, press "1".
(For example, if you choose the letters "JVC", keep the FUNCTION FORWARD (▼) or BACK (▲) button pressed until the letter "J" appears. Then, press the FUNCTION (+) button to move the cursor one letter position to the right. Press the FUNCTION FORWARD or BACK button to select the letter "V", then move the cursor to the right again with FUNCTION (+). In the same way, select "C", then press "1" to confirm.) The "Viewer Index" is displayed for a few seconds.

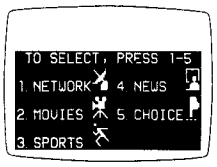


7) Press "1" to go to the next position within the category. Repeat steps 3) through 6). Press "2" to go to the next category.

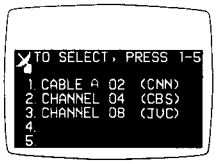
VIEWER INDEX Button

- Press VIEWER INDEX button ⑱ anytime you wish to call up a category list of those channels which have been preset with the SET VIEWER INDEX menu for convenient direct channel selection.

1) Press VIEWER INDEX button ⑱ to call up the following display.

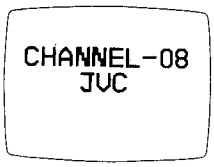


2) While the display is on the screen, press the corresponding number of 10-Digit Keypad ㉗ to select a category.
(For example, press "1" to select "NETWORK".)
The following display appears.

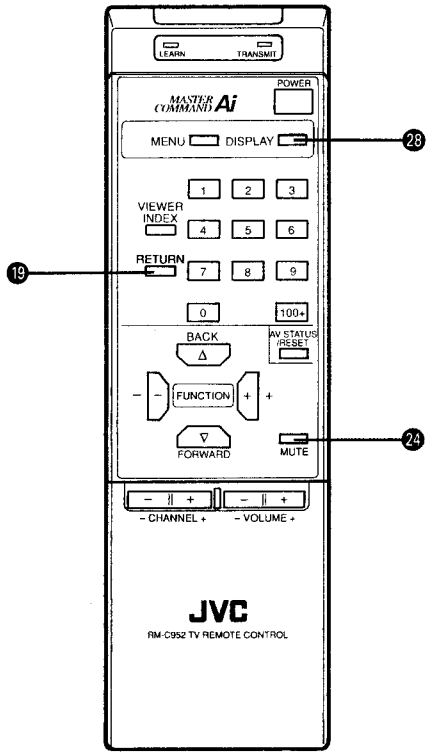


3) While the list is on the screen, press the corresponding number of 10-Digit Keypad ㉗ for the channel of your choice.
(For example, press "3" to select "CHANNEL 08 <JVC>".)

4) "CHANNEL 08 <JVC>" is tuned to.



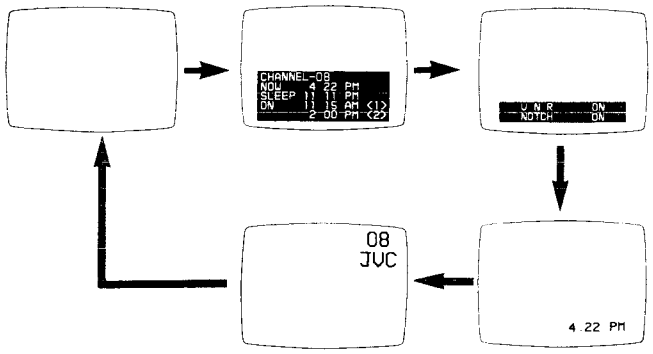
Note:
If the same channel is registered in two or more places, the station name with the smallest category number is displayed when the station is selected.
The station name with the smallest of the registration numbers in the same category is displayed.



DISPLAY Button

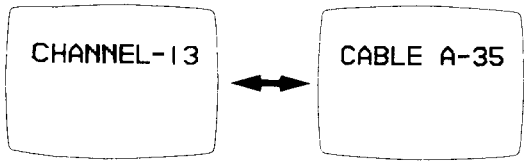
Press DISPLAY button ㉘ on the Remote Control. The channel number of the program you are now viewing, the SLEEP TIMER/ON TIMER settings, VNR NOTCH setting and the current time and the current channel are displayed in the order as shown below by each pressing of the DISPLAY buttons. The current time remains displayed on the screen until the DISPLAY button is pressed again.

Note: If the SLEEP TIMER and/or ON TIMER is cancelled, their settings will not be displayed.



RETURN Button

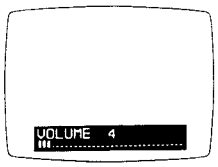
Press RETURN button ⑲ on the Remote Control.
The previously viewed channel will appear on the screen.
Press RETURN again to switch back to the original channel.
Repeatedly pressing RETURN switches between these two channels.



MUTE Button

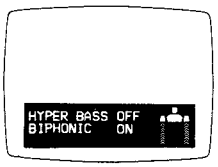
When the MUTE button ㉔ on the remote control is pressed, the volume level of the program you are watching is reduced to the preset level. If the preset level is greater than the current level, the level becomes 0.
For details on setting the volume level, see "7) SET MUTE LEVEL", on page 20.

Note: Changing the audio volume or channel number also restores the sound.



BIPHONIC Button

The "Biphonic" system is a unique sound enhancing system. By varying the phase and frequency characteristics of the sound, it makes the sound seem "wider", even with monaural sources. Press BIPHONIC button ㊴ on the Remote Control. The following display will appear on the screen. Press again to turn the Biphonic mode off. The display changes to "OFF" and the sound is restored to normal.

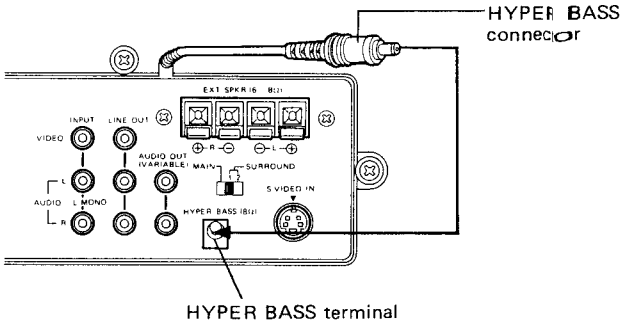


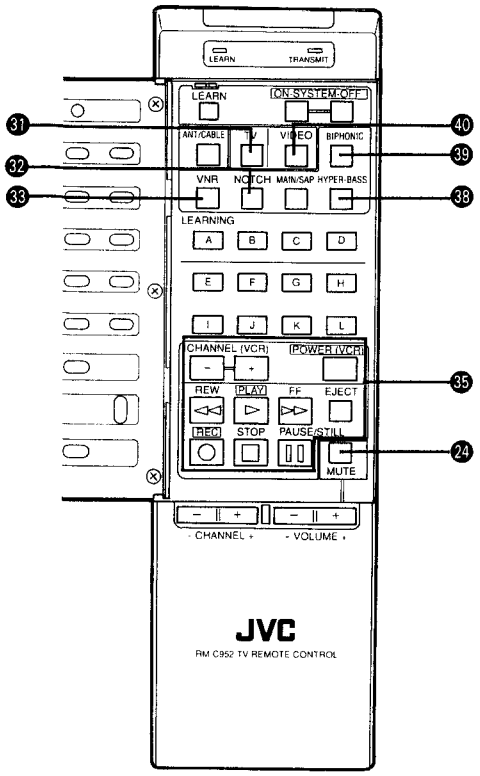
Note: This system has no effect on externally connected monaural sources, such as a monaural VCR, etc.

HYPER BASS Button

Open the door of the Remote Control and press HYPER BASS button ㊳ . Setup conditions are displayed on the screen. Press the HYPER BASS button to ON, then powerfully enhanced sound with an emphasis on the bass portion will be heard. Press again to OFF to restore the normal sound. Each pressing of this button switches between ON and OFF.

Note: When the HYPER BASS connector is disconnected from the HYPER BASS terminal, the HYPER BASS function does not operate.

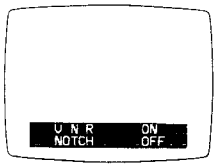




VNR Button

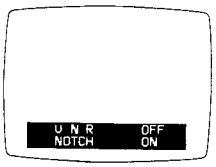
The "VNR", or "Video Noise Reduction" feature eliminates on-screen picture noise, making pictures appear clearer. Press VNR button ㉝ on the Remote Control. The following display will appear on the screen. Press again to turn the VNR mode off. The display changes to "OFF" and the picture is restored to normal. Each pressing of this button switches between ON and OFF.

- Normally, set this function to OFF.



NOTCH Button

The "Notch" feature substantially reduces horizontal noise, or "dot interference" appearing on the screen especially between two prominent colors bordering each other. Press NOTCH button ㉜ on the Remote Control. The following display will appear on the screen. Press again to turn the Notch mode off. The display changes to "OFF" and the picture is restored to normal. Each pressing of this button switches between ON and OFF.



VCR Controls

Your TV's Remote Control is provided with additional buttons ㉟ for controlling all major functions of the specified JVC VCRs listed below. Each button's designation corresponds to that of the VCRs'. Refer to the instruction manual of the VCR for detailed operation.

Operable JVC VCRs

HR-D130U	HR-D370U	HR-S200U
HR-D140U	HR-D470U	HR-S101U
HR-D142U	HR-D565U	
HR-D150U	HR-D566U	
HR-D170U	HR-D725U	
HR-D180U	HR-D756U	
HR-D250U	HR-S7000U	

*In addition to the above, new JVC VCR models are also operable via this Remote Control.

CHANNEL (VCR) Press to change channels of a connected VCR's built-in tuner. (With some models, this function is not available.)

PAUSE/STILL Press to engage Pause mode during recording, or to view a still picture during playback.

STOP Press to stop tape running.

REC Press simultaneously with PLAY button to start recording.

EJECT Press to eject the video cassette.

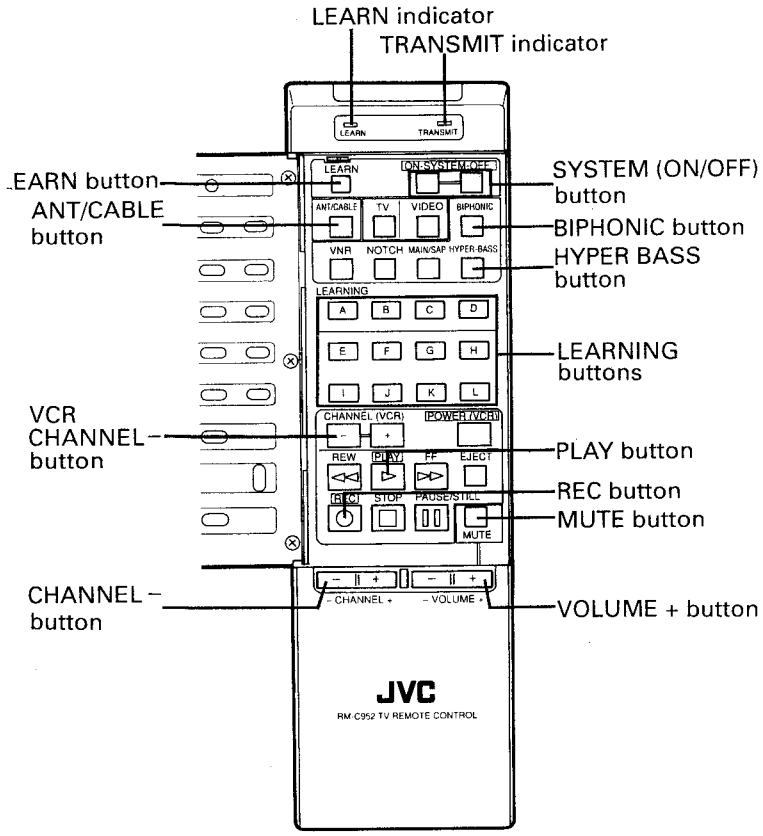
REW Press in Stop mode to rewind the tape. Press in Play mode to view speeded-up picture (Shuttle Search).

PLAY Press to play back the tape. And press simultaneously with REC to start recording.

FF Press in Stop mode to fast-forward the tape. Press in Play mode to view speeded-up picture (Shuttle Search).

POWER (VCR) Press to turn VCR's power on and off. (With some models, this function is not available.)

*When this TV and a JVC VCR are connected with an RF cable, the TV and VCR can be switched to the TV mode by pressing TV button ㉛ on the remote control. (With some models, this function is not available.)
Pressing VIDEO button ㊵ does not make the VCR enter the VIDEO mode.



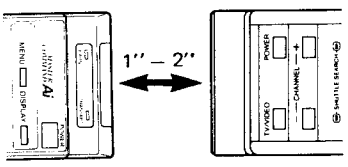
The MASTER COMMAND *Ai* remote control doesn't just control your TV. It can also control all your other video and audio equipment. And it has SYSTEM ON/OFF buttons so that you can switch all your equipment on or off in one go. Plus there's a volume control for the TV or your audio amplifier. So with just this one controller, you can control your whole system.

To get the MASTER COMMAND *Ai* to control other equipment, you have to teach it to mimic the individual remote controls for each piece of equipment. This is called programming and is done with the MASTER COMMAND *Ai* in the LEARN mode.

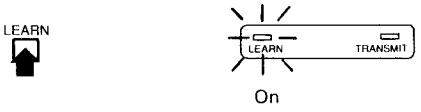
1. BASIC PROGRAMMING

Each of the LEARNING and VCR buttons on the MASTER COMMAND *Ai* can be programmed to mimic any of the buttons on any individual remote control.

1) Position the MASTER COMMAND *Ai* and the individual remote control as shown below so they are about one or two inches apart.



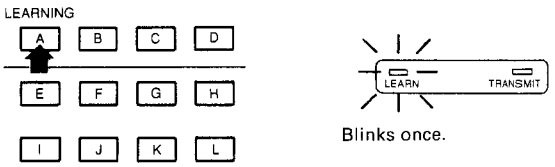
2) Open the door on the MASTER COMMAND *Ai* and press the LEARN button with something thin to enter the LEARN mode. The LEARN indicator will light.



On

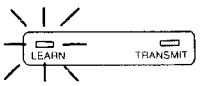
* You cannot control your TV with the MASTER COMMAND *Ai* in the LEARN mode. To control the TV, press the LEARN button again to exit the LEARN mode. (The LEARN indicator will go off.) The LEARN mode is automatically exited, the LEARN indicator going off, if no button has been pressed in the last minute. If this happens in the middle of programming, press the LEARN button again to reenter the LEARN mode, and reprogram the button you were working on when you were interrupted.

3) Press the LEARNING or VCR control button you want to program. The LEARN indicator will blink once.



Blinks once.

4) Press the button to be mimicked on the individual remote control. Wait until the LEARN indicator blinks three times.

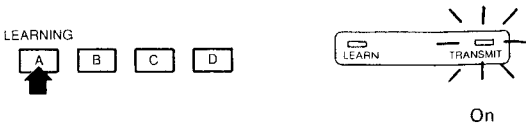


Blinks three times.

5) To program another button, repeat steps 3 and 4.

6) When the MASTER COMMAND *Ai* has been programmed to mimic all the buttons you want, press the LEARN button to exit the LEARN mode. The LEARN indicator will go off.

The MASTER COMMAND *Ai* can now be used where you would have used an individual remote control before.



On

2. VCR PROGRAMMING

The MASTER COMMAND *Ai* can be programmed to make the VCR start recording either when the REC and PLAY buttons are pressed together or when the REC button alone is pressed. Either way is possible no matter which way the VCR remote control actually does it.

- **VCR remote control uses REC button only, and you want MASTER COMMAND *Ai* to use REC button only, too**

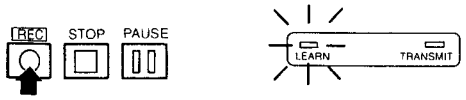
Program the REC and PLAY buttons individually, as described in 1. BASIC PROGRAMMING, above.

- **VCR remote control uses REC and PLAY buttons together, but you want MASTER COMMAND *Ai* to use REC button only instead**

1) Put the MASTER COMMAND *Ai* and the VCR remote control face to face.

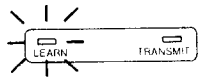
2) Open the door of the MASTER COMMAND *Ai* and press the LEARN button to enter the LEARN mode. The LEARN indicator will light.

3) Press the REC button on the MASTER COMMAND *Ai*. The LEARN indicator will blink once.



Blinks once.

4) Press the REC and PLAY buttons on the VCR remote control together. Wait until the LEARN indicator blinks three times.



Blinks three times.

5) Press the LEARN button to exit the LEARN mode. The LEARN indicator will go off.

The MASTER COMMAND *Ai* can now be used to make a recording instead of the VCR remote control. Try it out to check it works.

- **VCR remote control uses REC button only, but you want MASTER COMMAND *Ai* to use REC and PLAY buttons together instead**

1) Put the MASTER COMMAND *Ai* and the VCR remote control face to face.

2) Press the LEARN button to enter the LEARN mode. The LEARN indicator will light.

3) Press the REC and PLAY buttons on the MASTER COMMAND *Ai* together. The LEARN indicator will blink once.

4) Press the REC button on the VCR remote control. Wait until the LEARN indicator blinks three times.

5) Press the LEARN button to exit the LEARN mode. The LEARN indicator will go off.

The MASTER COMMAND *Ai* can now be used to make a recording instead of the VCR remote control. Try it out to check it works.

- **VCR remote control uses REC and PLAY buttons together, and you want MASTER COMMAND *Ai* to use REC and PLAY buttons together, too**

1) Put the MASTER COMMAND *Ai* and the VCR remote control face to face.

2) Press the LEARN button to enter the LEARN mode. The LEARN indicator will light.

3) Press the REC and PLAY buttons on the MASTER COMMAND *Ai* together. The LEARN indicator will blink once.

4) Press the REC and PLAY buttons on the VCR remote control together. Wait until the LEARN indicator blinks three times.

5) Press the LEARN button to exit the LEARN mode. The LEARN indicator will go off.

The MASTER COMMAND *Ai* can now be used to make a recording instead of the VCR remote control. Try it out to check it works.

3. SPECIAL PROGRAMMING

- **Sequential programming**

One button on the MASTER COMMAND *Ai* can be programmed to mimic the pressing, one after another, of several buttons on one or more individual remote controllers. In other words, *button sequences* can be programmed. These sequences mean that several things can be done simply by pressing one button on the MASTER COMMAND *Ai*. The total number of individual remote control buttons that can be mimicked by each button on the MASTER COMMAND *Ai* is as follows.

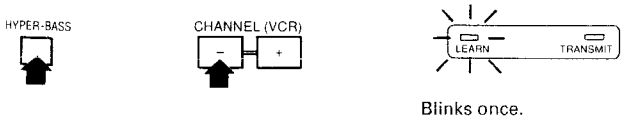
Sequence Limits
Buttons A to D: 10 buttons each
Buttons E to L: 5 buttons each
SYSTEM (ON/OFF) buttons: 5 buttons each

Note: The SYSTEM (ON/OFF) buttons are programmed at the factory with a sequence to switch this TV, a JVC VCR and a JVC receiver on and off. If you program these buttons with a new sequence, the factory-programmed sequence is overridden. However, if you press the CLEAR button, the factory programmed sequence will return. You can program the SYSTEM (ON/OFF) buttons with a sequence to switch on a mixture of JVC and non-JVC equipment. Note, however, that certain pieces of equipment *cannot* be switched on and off remotely. (These have heavy mechanical on/off buttons instead of light electronic ones.)

1) Place the MASTER COMMAND *Ai* and the individual remote control face to face.

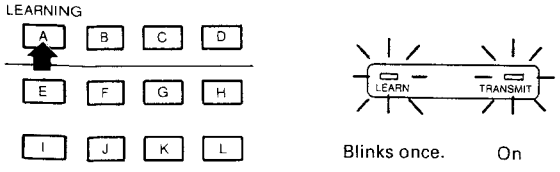
2) Press the LEARN button to enter the LEARN mode. The LEARN indicator will light.

3) Press the HYPER BASS and VCR CHANNEL– buttons together. The LEARN indicator will blink once. (SEQUENCE PROGRAMMING mode)



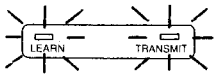
Blinks once.

4) Press the button you want to program (buttons A to L or the SYSTEM (ON/OFF) buttons). The LEARN indicator will blink once and the TRANSMIT indicator will light.



Blinks once. On

5) Press the first button to be mimicked in the sequence on the appropriate individual remote control. Wait until the LEARN indicator blinks three times and the TRANSMIT indicator blinks once.



Blinks three times. Blinks once.

6) Press the next button to be mimicked in the sequence, on a different individual remote control if needs be. Again, wait until the LEARN indicator blinks three times and the TRANSMIT indicator blinks once.

7) If there are more buttons in the sequence to be mimicked, repeat step 6 for each of them. If you reach the sequence limit (see "Sequence limit" on page 26) for the button being programmed, the TRANSMIT indicator will go off, in which case go to the next step.

8) If you want to program another button on the MASTER COMMAND *Ai* with a sequence, go to step 3.

9) Press the LEARN button to exit the LEARN mode. The LEARN indicator will go off.

The MASTER COMMAND *Ai* can now be used where you would have used several individual remote controls before. Try it out to check it works.

The MASTER COMMAND *Ai* remote control has the following functions for operating audio/video equipment connected to the television set as well as the the functions described above.

- **SYSTEM ON/OFF Button**

This function switches all the JVC's audio/video equipment on and off at the same time. (Some equipment cannot be switched on and off with this function.) The function that switches the television, VCR, and amplifier on and off has been programmed. This button has a learning function and audio/video equipment made by manufactures other than JVC can be programmed. For the registration method, see Sequential programming.

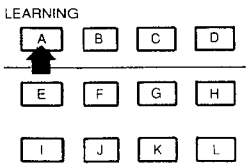
- **Self code copy programming**

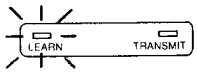
Any button on the MASTER COMMAND *Ai* can be mimicked by one of the LEARNING buttons. This is especially useful in sequence programming when one or more of the buttons in the sequence being programmed is on the MASTER COMMAND *Ai* itself.

Basic Self code copy programming

1) Press the LEARN button to enter the LEARN mode. The LEARN indicator with light.

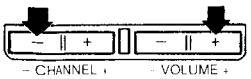
2) Press the LEARNING button you want to program. The LEARN indicator will blink once.

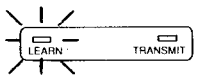




Blinks once.

3) Press the CHANNEL- and VOLUME+ buttons together. (SELF CODE COPY PROGRAMMING mode) The LEARN indicator will blink once.





Blinks once.

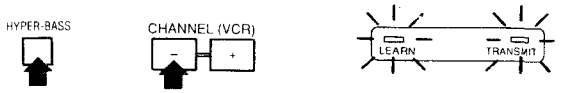
4) Press the button to be mimicked. The LEARN indicator will blink twice.

5) When programming is complete, press the LEARN button to exit the LEARN mode. The LEARN indicator will go off.

Mixed Sequential Programming/Self code copy programming

1) Press the LEARN button to enter the LEARN mode. The LEARN indicator will light.

2) Press the HYPER-BASS and VCR CHANNEL– buttons together. The LEARN indicator will blink once. (SEQUENTIAL PROGRAMMING mode)



Blinks once.

3) Press the button you want to program (buttons A to L). The LEARN indicator will blink once and the TRANSMIT indicator will light.

4) Press the first button to be mimicked in the sequence on the appropriate individual remote control. Wait until the LEARN indicator blinks three times and the TRANSMIT indicator blinks once. To mimick other buttons, repeat these operations.

5) Press the CHANNEL– and VOLUME + buttons together. (SELF CODE COPY PROGRAMMING mode) The LEARN indicator will blink once. Then press the button to be mimicked on the MASTER COMMAND *Ai*. Wait until the LEARN indicator blinks three times and the TRANSMIT indicator blinks once.

6) If there are more buttons in the sequence to be mimicked, repeat step 5 for each of them. If you reach the sequence limit for the button being programmed, the TRANSMIT indicator will go off, in which case, go to the next step.

7) To program another button on the MASTER COMMAND *Ai* with a sequence, go to step 2.

8) Press the LEARN button to exit the LEARN mode. The LEARN indicator will go off.

The MASTER COMMAND *Ai* can now be used where you would have used several individual remote control and the MASTER COMMAND *Ai* itself before.

- **Controlling your Hi-Fi audio equipment without programming the MASTER COMMAND *Ai***

The following buttons on the MASTER COMMAND *Ai* can be made to control your audio and video equipment instead of the TV.

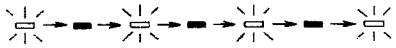
Button	Hi-Fi audio control operation
TV button	Switches the VCR and receiver to the TV mode.
VIDEO button	Switches the TV and receiver to the VIDEO1 mode
BIPHONIC button	Switches the TV to the VIDEO1 mode and the receiver to the VIDEO2 mode.
VOLUME – button	Receiver VOLUME–
VOLUME + button	Receiver VOLUME+
MUTE button	Receiver MUTE

Changeover method

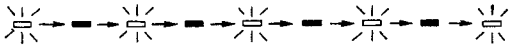
1) Press the LEARN button to enter the LEARN mode. The LEARN indicator will light.

2) Hold down the TV and VIDEO buttons until the LEARN indicator starts blinking.

When the Hi-Fi audio operation function is available, the LEARN indicator blinks three times. (Then the indicator lights.)

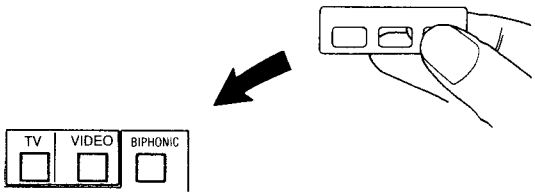


When the MASTER COMMAND *Ai* is set to control the TV, the LEARN indicator blinks four times.



3) When the desired mode is entered, press the LEARN button to terminate the LEARN mode. (The LEARN indicator goes off.)

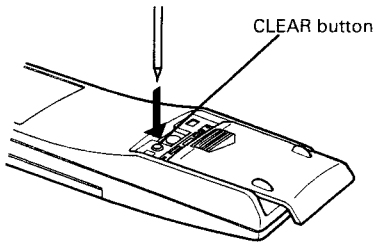
4) Remove the backing on the supplied card with TV, VIDEO1, and VIDEO2 printed on it, and stick the card over the TV, VIDEO and BIPHONIC buttons.



Now the changed functions can be operated with the MASTER COMMAND *Ai*. Try them out.

4. PRECAUTIONS

- **CLEAR Button**
  The CLEAR button is under the battery cover. Press this button with something thin to erase all your programming. If the LEARN mode is in effect when you do this, it will remain in effect, but SEQUENTIAL PROGRAMMING and SPECIAL-PROGRAMMING, if being used, will be reset. When the button is pressed, the LEARN indicator blinks once.



- **Battery Replacement**
  When you remove the old batteries, you have ten minutes to insert new ones before your programming is erased. So if you do not want to lose your programming, replace the batteries within ten minutes. (See "REMOTE CONTROL USE" on page 3.)

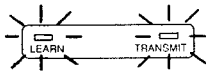
- **Button sequences using buttons A to L and the SYSTEM (ON/OFF) buttons follow the order of programming.** If the order of programming is incorrect, the sequence may not have the desired effect. Make sure you program sequences in the correct order.

  Since several signals are transmitted during a button sequence, it takes a while to transmit all of them if a sequence is long (one second for each button mimicked). So keep the MASTER COMMAND *Ai* pointing at your system while the TRANSMIT indicator is on.

- **The MASTER COMMAND *Ai* is designed to control Hi-Fi audio and video equipment.** It may not be possible to program it to operate electrical appliances like air conditioners, because they use different kinds of control signal.

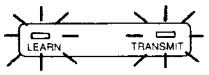
- **The LEARN and TRANSMIT indicators on the MASTER COMMAND *Ai* behave as follows:**

1) When both indicators blink twice together
   This means that the MASTER COMMAND *Ai* is fully programmed; it cannot be programmed any further. If you want to add some (If it's being added it must be new!) programming, press the CLEAR button once to erase all the programming, then reprogram.



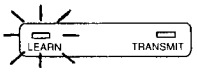
Blinks twice.

2) When both indicators keep blinking in the LEARN mode
   This means that a button that cannot be programmed is being pressed, or two buttons that are not supposed to be pressed together are being pressed at the same time.



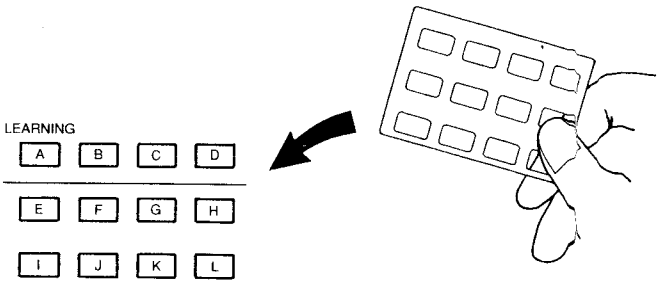
Keep blinking.

3) When the LEARN indicator blinks once immediately after the battery is replaced
   This means that all the programming has been erased as a result of the battery being replaced. Reprogram if necessary.



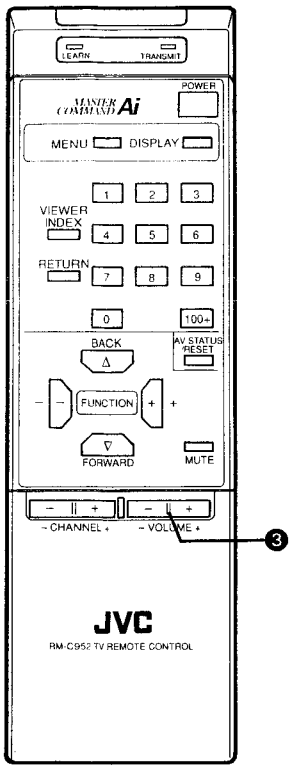
Blinks once.

- **If you program the MASTER COMMAND *Ai*, attach the supplied card to the section of the buttons.** If needs be, remove the backing on the supplied card with TV, VIDEO1, and VIDEO2 printed on it, and stick the card over the buttons. (See "Hi-Fi AUDIO EQUIPMENT OPERATION FUNCTIONS" on page 28.)

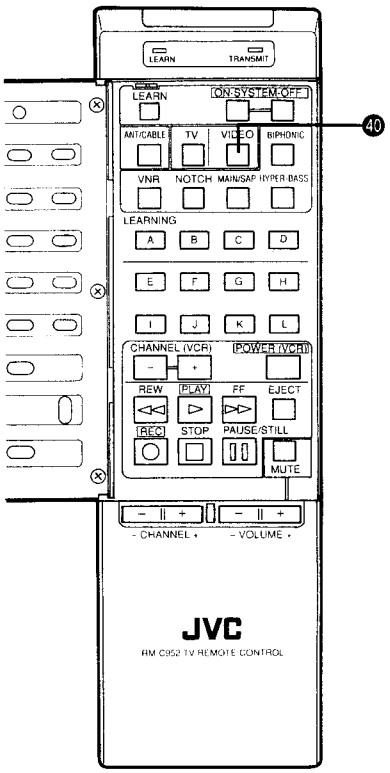


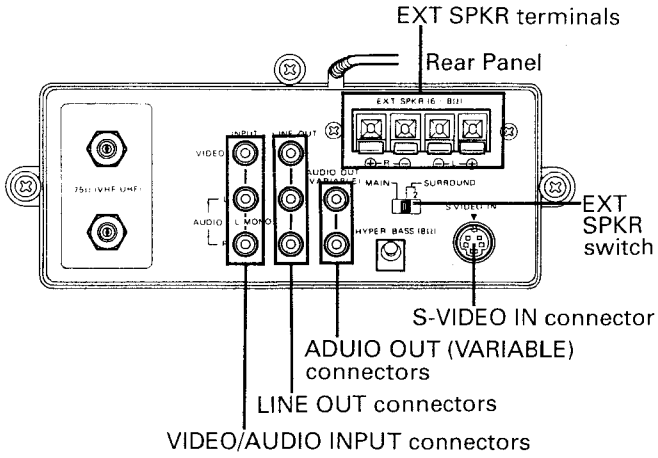
CONNECTING TO EXTERNAL EQUIPMENT

Remote Control Door is closed.

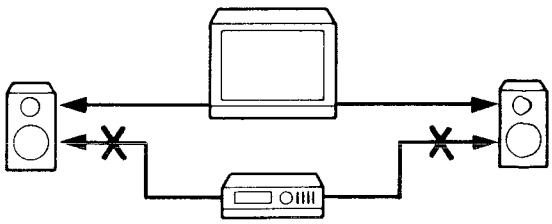


Remote Control Door is open.





- **Prior to making any connections to your TV set, be sure to turn the POWER off.**
- **For a more detailed understanding of each connection, it is recommended that you read the instruction manual for each connected component.**
- **If you use video or audio equipment placed too near the Monitor/Receiver, picture and/or sound may become distorted due to interference between these components. In such a case, separate each piece of equipment at a sufficient distance.**
- **The following shows examples for connecting external equipment.**
- **Do not connect another audio source to the same speaker to which the TV set is connected, otherwise damage may result to the amplifier of the TV set or to that of the other audio source.**

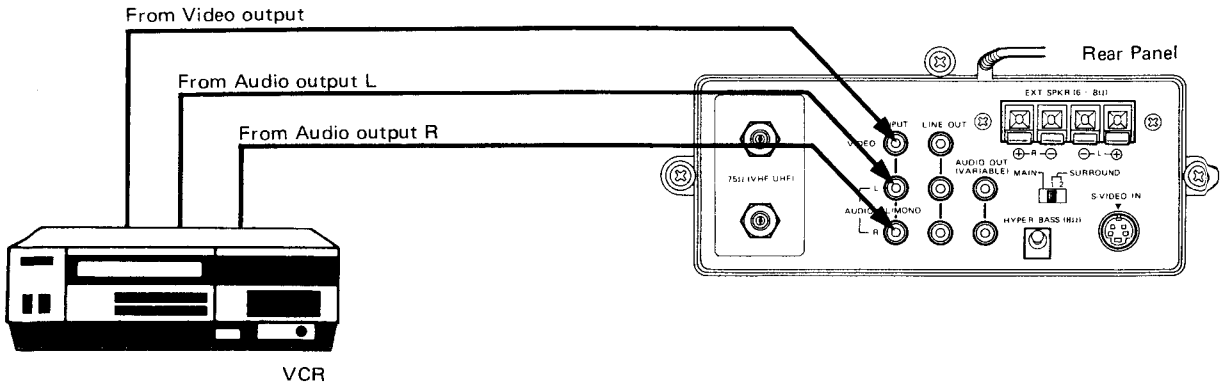


1 VIDEO/AUDIO INPUT connectors

- To view a connected video source, press VIDEO button 40 on the Remote Control to engage the VIDEO mode.

Notes:

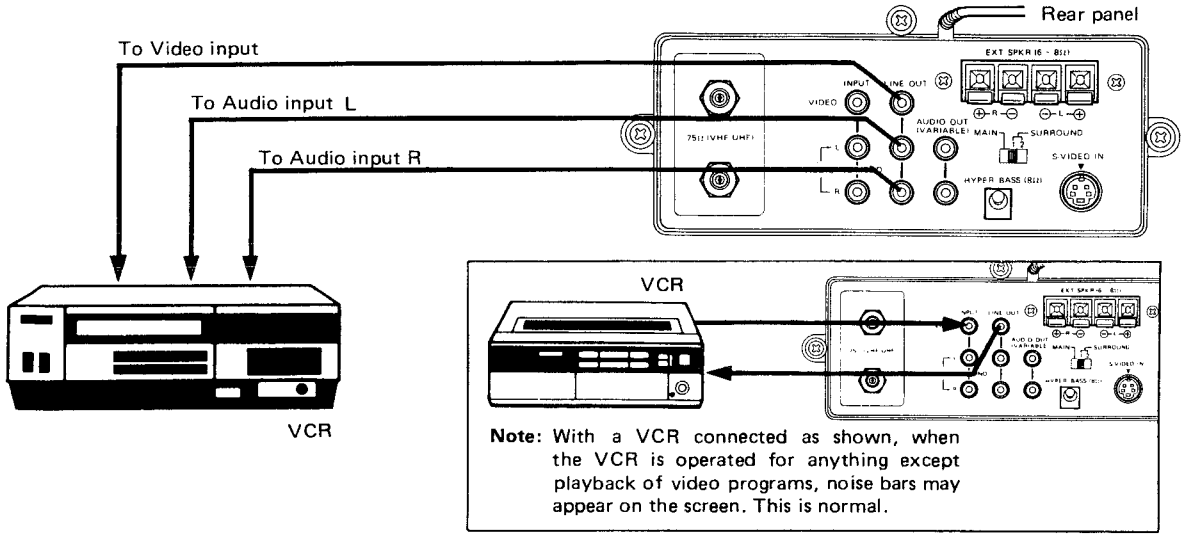
- If the connected video equipment outputs monaural audio, connect to the AUDIO L/MONO (left channel) connector. Sound will be output from both right and left speakers.
- When the S-VIDEO IN connector is used, this VIDEO connector function becomes inoperable.



2 LINE OUT connectors

- The video and audio signals available at these connectors are the same as the source presently being monitored on the TV.
  This is convenient for VCR connection.

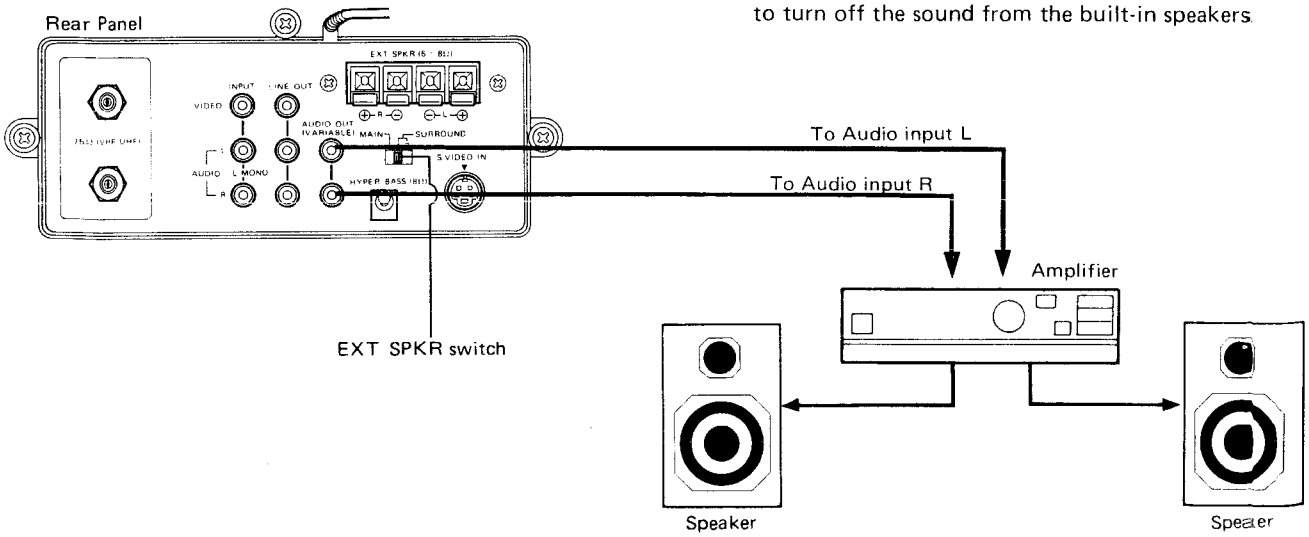
Note: Video signals that are input to S-VIDEO IN connector cannot be output from VIDEO connector of LINE OUT connectors.



Note: With a VCR connected as shown, when the VCR is operated for anything except playback of video programs, noise bars may appear on the screen. This is normal.

3 AUDIO OUT (VARIABLE) connectors

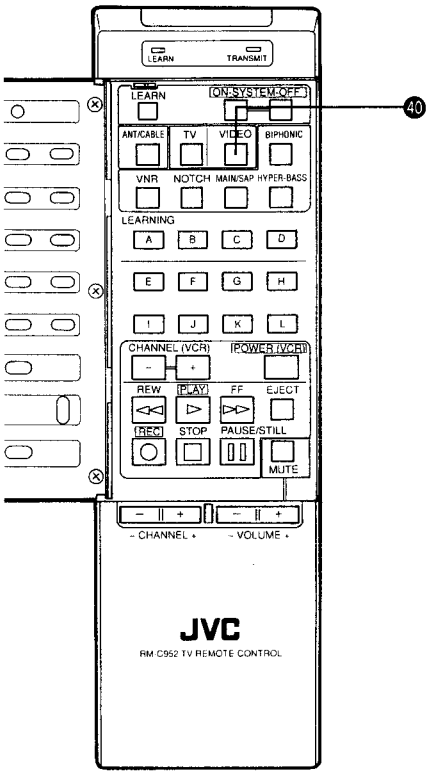
- The audio signals available at these connectors are the same as the audio source of the program being monitored on the TV screen.
- Connect to a stereo amplifier to these connectors to listen to the sound through external speakers connected to the amplifier. The audio output level can be adjusted via the VOLUME (-/+) button(s) on either the Remote Control or front panel ❸.
- If the sound which is output from the TV's built-in speaker is noisy, set the EXT SPKR switch ⓭ to MAIN to turn off the sound from the built-in speakers.

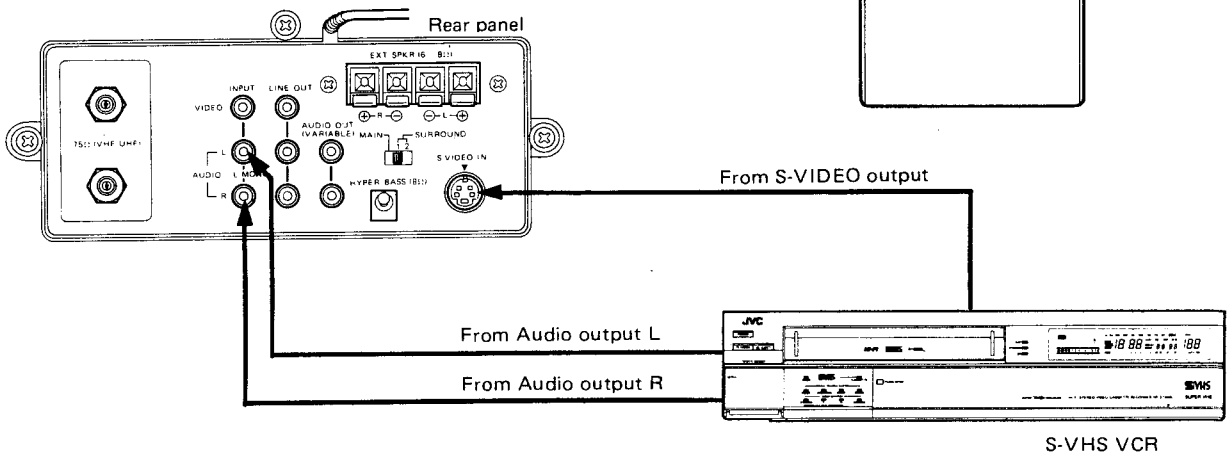


4 S-VIDEO IN connector

- S-VIDEO IN connector is for the separated Y (luminance) and C (chrominance) video signals conforming to the NTSC system, ideal for connection of an S-VHS (Super VHS) VCR.
- Connect the audio output cable to AUDIO INPUT connectors.
- Press VIDEO button ⑩ on the Remote Control to engage the VIDEO mode to view pictures from the S-VHS VCR.

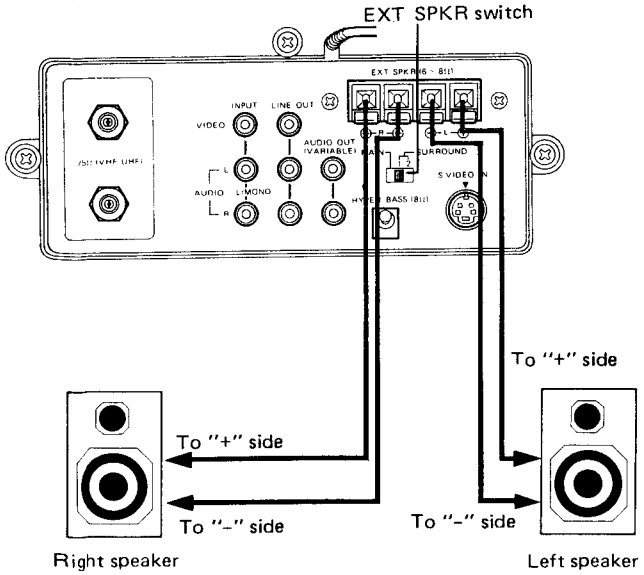
Note: When equipment is connected to this connector, the VIDEO INPUT connector function becomes inoperable.





5 Using external speakers

- Connect speaker cables while making sure that the wiring of speaker's polarities is correct.
- Set EXT SPKR switch ⑬ to MAIN. The sound from the TV's built-in speakers is turned off, and the sound will be heard only from the speakers which are connected to the EXT SPKR terminals ⑪ .



Notes:

- Use speakers of 6 to 8-ohm impedance.
- If the "+" and "–" terminals are short-circuited, it may cause damage to the TV set.
- It is recommended to use magnetically shielded speakers. If you use speakers other than these, place them at a sufficient distance from the TV set, otherwise the magnetic field generated from such speakers cause unsteady picture color.
- Do not connect another audio source to the same speaker to which the TV set is connected, otherwise damage may result to the amplifier of the TV set or to that of the other audio source.

< Setting the EXT SPKR switch >

The output sound differs depending on the switch setting.

Switch setting	Sound output	
	Built-in speakers	Speakers connected to EXT SPKR terminals
MAIN	No sound	Normal sound
SURROUND 1	No sound	Surround effect sound
SURROUND 2	Normal sound	Surround effect sound

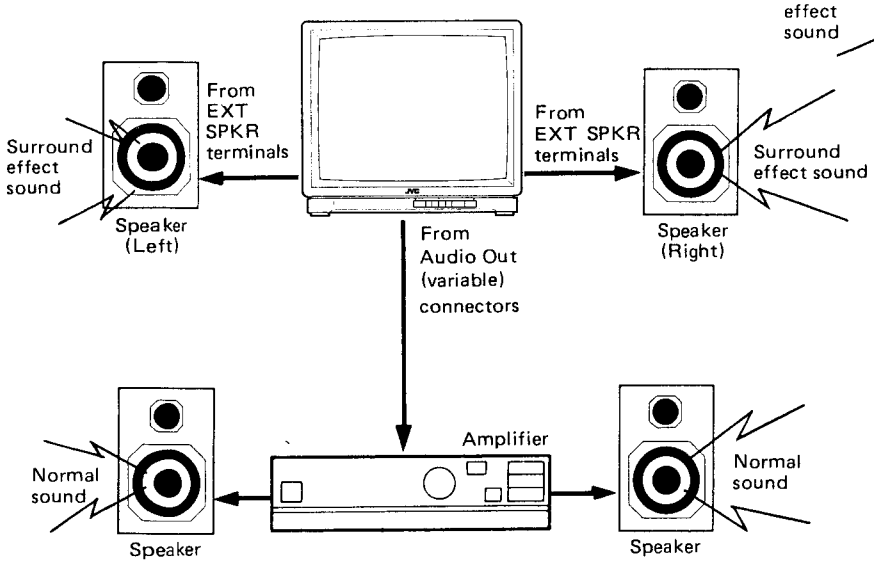
6 Listening to Surround Sound

"Surround Sound" is a sound reproduction process resulting in a three-dimensional aural experience that is a combination of "surround effect sound" and "normal sound", delivered from both left and right channels at the same time.

- The surround effect sound is possible only when the sound source being listened to is a stereo source. (The surround effect sound is not possible with a monaural sound source.)
- Set the marker of the scale of the BALANCE adjustment mode to its center position using FUNCTION buttons and/or AV STATUS/RESET button.

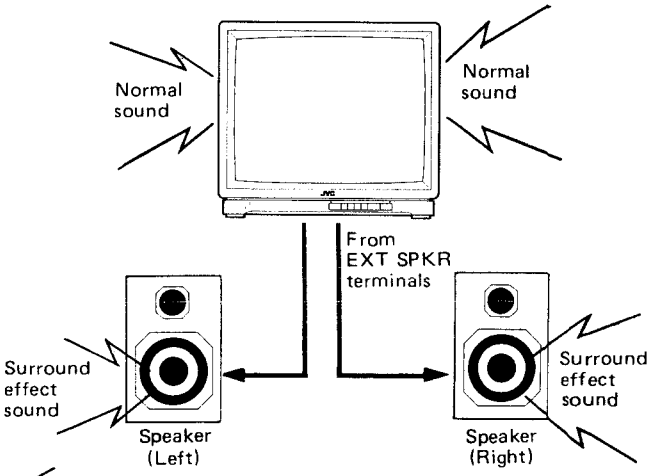
(A) When using an external stereo component system

(1) Connect each component as illustrated.
(2) Set EXT SPKR switch ⓭ to SURROUND 1.



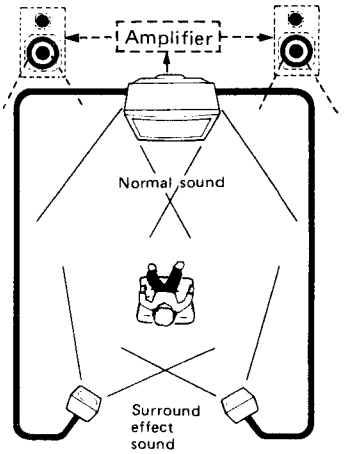
(B) When connecting speakers to the EXT SPKR terminals

(1) Connect speakers to the EXT SPKR terminals.
(2) Set EXT SPKR switch ⓭ to SURROUND 2.



< Speaker positioning >

As shown below, position the speakers so that the normal sound can be heard in front, and the surround effect sound can be heard in back of the listening position.

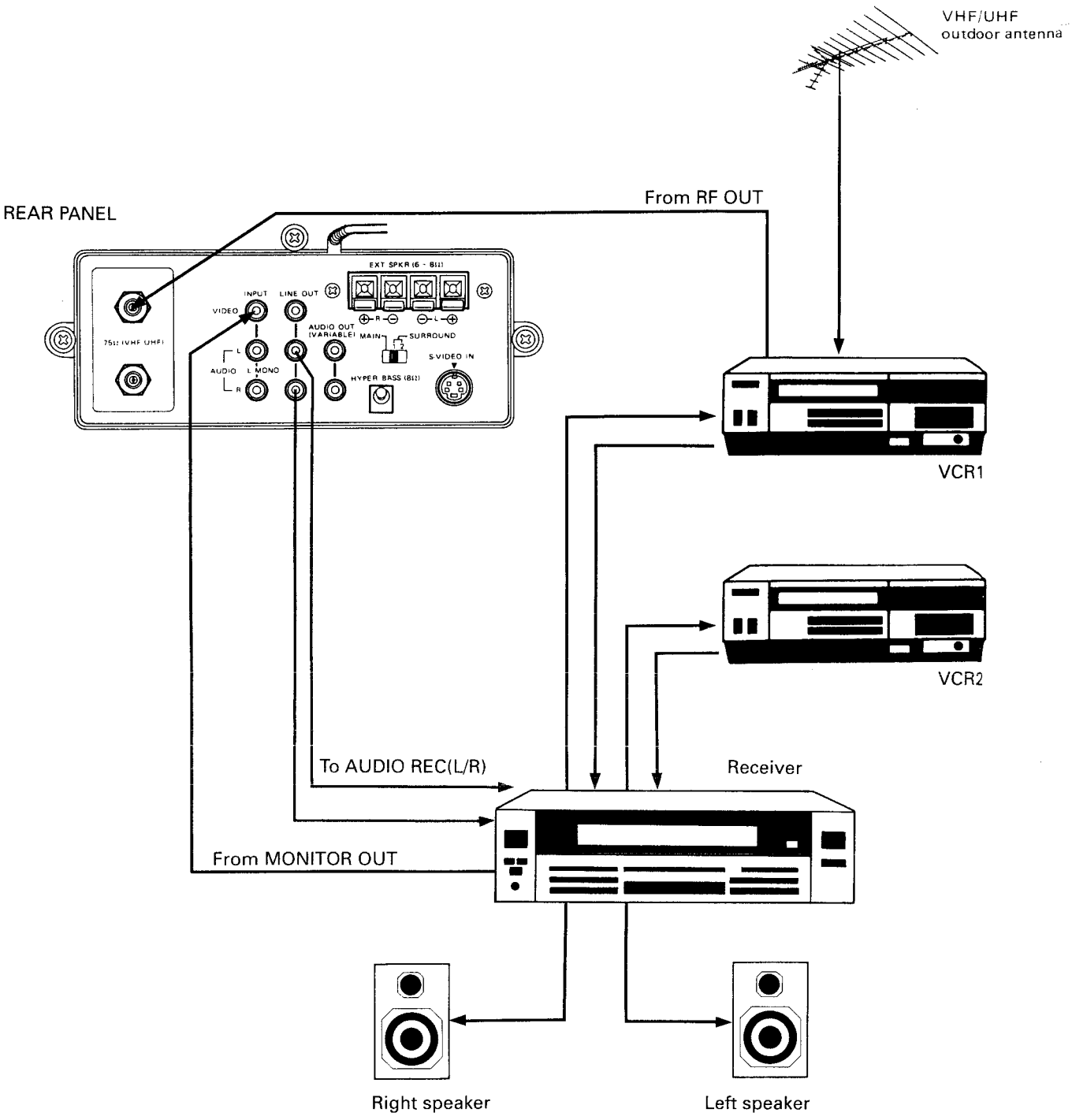


7 Audio/video equipment system connection example

- Various pieces of audio and video equipment can be plugged into the connectors on the back of the TV.
- By using the audio/video equipment control feature of the remote control, the connected JVC's equipment can be switched on and off and input signals can be switched with the remote control. (For details, see "Audio/video equipment control feature" on page 28.)

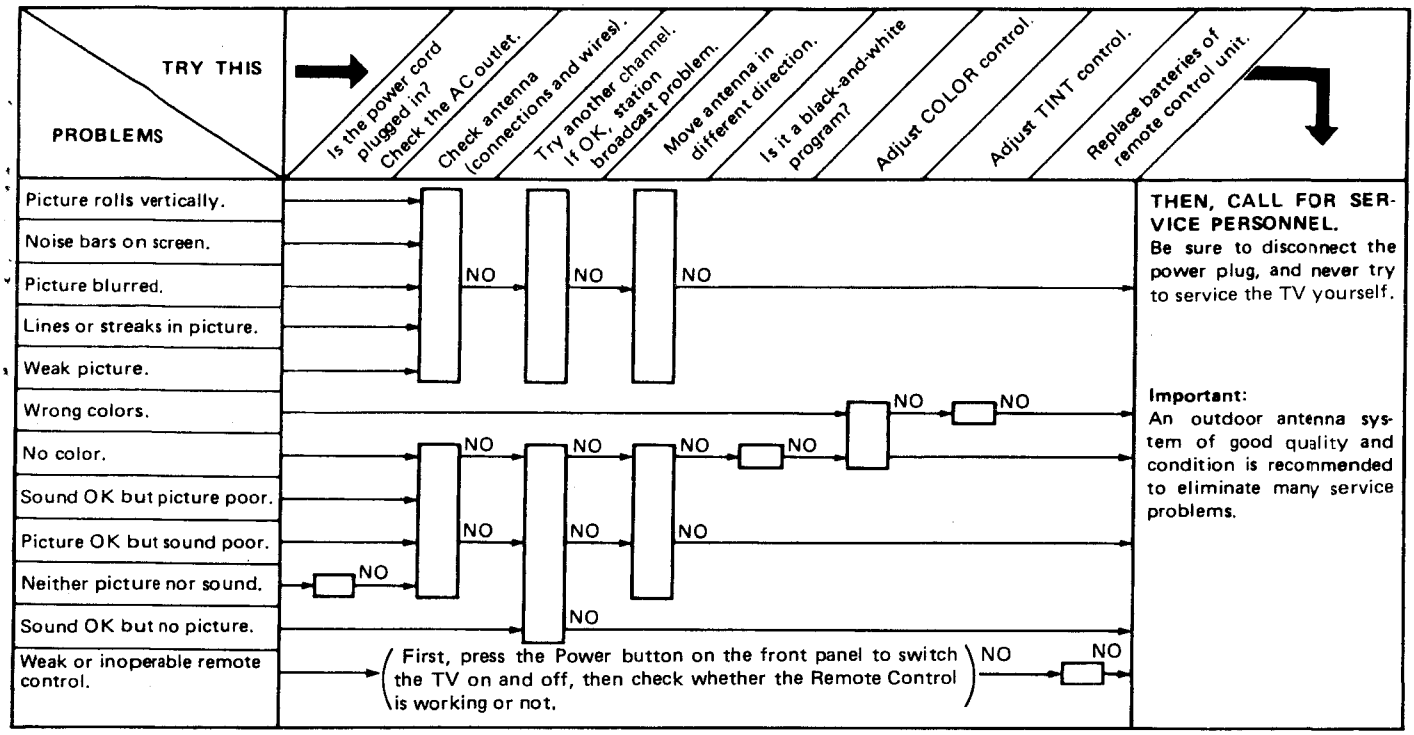
Notes:

See the instruction manual of the equipment to be connected.



BEFORE YOU CALL FOR SERVICE

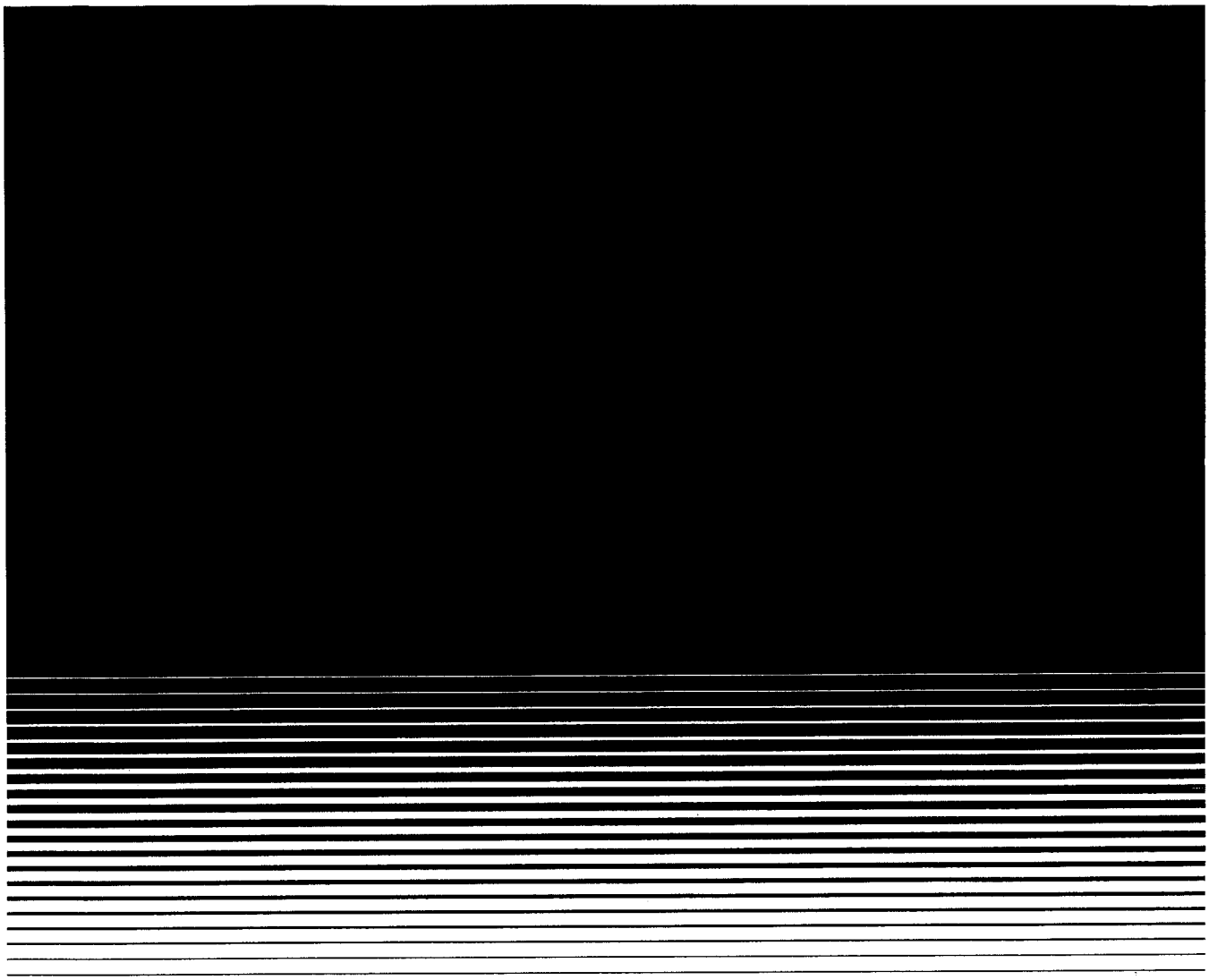
Be sure to review all the instructions written in this booklet. Then try to check according to the following chart.


TRY THIS
PROBLEMS
Is the power cord plugged in? Check the AC outlet.
Check antenna (connections and wires).
Try another channel. If OK, station broadcast problem.
Move antenna in different direction.
Is it a black-and-white program?
Adjust COLOR control.
Adjust TINT control.
Replace batteries of remote control unit.
Picture rolls vertically.
Noise bars on screen.
Picture blurred.
Lines or streaks in picture.
Weak picture.
Wrong colors.
No color.
Sound OK but picture poor.
Picture OK but sound poor.
Neither picture nor sound.
Sound OK but no picture.
Weak or inoperable remote control.
NO
First, press the Power button on the front panel to switch the TV on and off, then check whether the Remote Control is working or not.
THEN, CALL FOR SERVICE PERSONNEL.
Be sure to disconnect the power plug, and never try to service the TV yourself.
Important:
An outdoor antenna system of good quality and condition is recommended to eliminate many service problems.

SPECIFICATIONS

Type	: Color monitor/receiver
Reception system	: NTSC system, BTSC system (Multichannel sound)
Channel coverage	: VHF 2 – 13, UHF 14 – 69; Sub-Mid, Mid, Super, Hyper and Ultra bands (180-channel frequency synthesizer system)
Power requirement	: AC 120 V, 60 Hz
Power consumption	: Max. 160 W, Avg. 108 W
Screen size	: 27" diagonally measured, Full Square
Audio output	: 5 W + 5 W; 15 W (for HYPER BASS Sound feature)
Speakers	: 3-3/16" x 4-3/4" ellipse x 2, 4-3/4" round x 1
Antenna input terminal	: 75-ohm (VHF/UHF) terminal (F-type connector)
External input terminals	: Video/1 Vp-p, 75 ohms Audio/500 mV rms (-4 dBs), high impedance
Line output terminals	: Video/1 Vp-p, 75 ohms Audio/500 mV rms (-4 dBs), low impedance (400 Hz when modulated 100 %)
S-VIDEO IN terminal	: Y/1 Vp-p positive, 75 ohms (negative sync provided) C/0.286 Vp-p (burst signal), 75 ohms
Variable audio output terminals	: More than 0 – 1550 mV rms (+6 dBs), low impedance (400 Hz when modulated 100 %)
External speaker terminals	: Impedance 6 to 8 ohms
External dimensions (W x H x D)	: 25-5/8" x 22-5/8" x 20-1/2"
Weight	: 89.8 lbs
Accessories	: Remote control unit (RM-C952) AAA-size alkaline dry-cell battery x 2

Design and specifications subject to change without notice.



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